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THE VALUE OF IMPONDERABLES*

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BOSTON

EVERY medical student is familiar with the Ether Dome of the Massachusetts General Hospital and the words beginning, "On October 16, 1846, in this room, then the operating theater of the Hospital, was given the first public demonstration of anesthesia to the extent of producing insensibility to pain during a serious surgical operation." I have often wondered how knowledge of this achievement spread over the world so promptly — largely, it seems to me, through a strange combination of the two imponderables chance and friendship.

Dr. William Morton was a dentist, young and ambitious, poor and struggling hard to obtain a foothold in Boston. He was an ingenious person in a region where bad teeth were frequent so that he quickly managed to achieve distinction as a maker of false ones. From his early days he had a flair for publicity, and soon after entering practice he formed the habit of advertising in the newspapers; in this way he grew to be friends with one of the shrewdest reporters — a man named Albert Tenney,‡ of the *Boston Evening Journal*.

The newspapers made interesting reading. In the fall of 1846, besides realizing that Dr. Morton could provide a reliable and handsome set of false teeth by a new process, one might have picked up what little needed to be known of the events on the periphery of a universe of which Boston was clearly the hub; in addition to keeping comfortable track of the deaths or other misadventures of one's friends, one might have discovered that early in November the new building of the Harvard Medical School on North Grove Street was to be opened.

The *Boston Evening Journal* came out in the late afternoon and gave the news in a chatty fashion, easy to read while one's head nodded after supper as one sat by the table in the parlor where the reading lamp was placed. When you got home on Thursday evening, October 1, and glanced through the paper, your fancy, I trust, was caught by the following item:

> We would call the attention of our readers to the advertisement of W. T. G. Morton, Dentist, No. 19 Tremont Row. This gentleman has been very successful in his practice in the city. Last evening, as we were informed by a gentleman who witnessed the operation, an ulcerated tooth was extracted from the mouth of an individual, without giving him the slightest pain. He was put into a kind of sleep, by inhaling a preparation, the effect of which lasted for about three-quarters of a minute, just long enough to extract the tooth. The gentleman, who detected the principal ingredient of the preparation by its odor, states that the use of it is entirely free from danger.

You had no way of knowing that here was reported the astonishing adventure that Mr. Eben H. Frost had experienced. Nor, unless you had the imagination of Dr. Morton, Mr. Tenney and young Dr. Henry J. Bigelow, did you appreciate, as Dr. Waterhouse might have remarked, that here was something curious in the medical line: a painful surgical operation conducted painlessly. Most probably you merely glanced at the paragraph, yawned rather scornfully, and remarked to your wife that Dr. Morton was going much too far in his efforts to get patients.

The Saturday, October 17, issue, however, printed something much more startling. Now you read a paragraph that was almost incredible:

> *Successful Operation.* Yesterday morning, Dr. Morton, Dentist, No. 19 Tremont Row, at the invitation of Dr. Haywood, visited the McLean Hospital, and administered his preparation to produce sleep, to a person about to undergo the operation of the extraction of a tumor from the neck. We learn from a gentleman who conversed with one of our oldest and most respected physicians who witnessed the operation, that the success of Dr. Morton's experiment was complete. The patient sitting in a chair, with every thing made ready by Dr. Warren, who extracted the tumor, inhaled the preparation for a very brief space of time, when he fell into a quick slumber, and the surgeon proceeded to extract the tumor. The patient did not manifest the slightest symptoms of suffering, and no muscular action whatever. He appeared to be totally insensible to what was going on, till very near the close of the operation, which was quite protracted, when he drew a long sigh. It is quite as much for the in-

*Presented at a symposium "The Hospital in the Community" held during the Ether Day Centenary of the Massachusetts General Hospital, Boston, October 16, 1946.

†Lecturer on the history of medicine, Harvard Medical School; consulting physician, Peter Bent Brigham Hospital.

‡Mr. Tenney became one of the leading newspaper men of Maine, always progressive in matters affecting public good and untiring in his efforts to correct public abuse. A good account of his life is found in the obituary records of the graduates of Bowdoin College and the Medical School of Maine for the year ending June 1, 1895 (Number 6, second series).

terest of the surgeon as for the patient, that the preparation should be administered, for while it renders the latter insensible to the pain attending severe surgical operations, it affords the former the means of doing his work, freed from all interruptions on the part of the patient, and gives him facilities for performing operations in the most expeditious manner.*

Several apparently fortuitous incidents occurred during the interval between the appearance of these notices. Among others, Mr. Tenney engaged in a new enterprise, Dr. Bigelow began to explore a new field, and older men of great influence, like Dr. Jacob Bigelow, Mr. Edward Everett and Dr. John C. Warren, made their appearance on the scene. Dr. Bigelow was president of the Massachusetts Medical Society, Mr. Everett was president of Harvard College, and Dr. Warren not only was senior surgeon at the Hospital and professor of surgery at Harvard Medical School but also had his finger in almost every pie important to the social and intellectual life of the city.

Mr. Tenney, with a good newspaperman's sense of news values, had been present at Dr. Morton's office to witness Mr. Frost's extraction. He was so impressed by Dr. Morton's methods that presently he signed an unusual contract†: he agreed to study with Morton to master the art of dentistry and in return to be responsible for such advertising and other writing as his chief should direct. He proved an admirable publicity agent, so that in a surprisingly short time more than a hundred persons were able to testify that teeth could be extracted with negligible discomfort.

Young Dr. Bigelow was deeply imbued with the numerical method of Louis as applied to clinical research and was bounding with energy and enthusiasm. He had been appointed to the staff of the Massachusetts General Hospital but so far had been given little opportunity to demonstrate his ability.

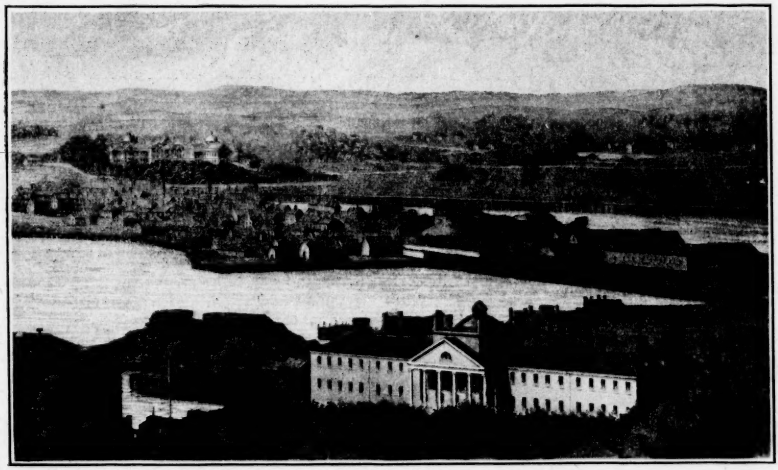


FIGURE 1. *The Massachusetts General Hospital in 1846.*
The Ether Dome can be seen, as well as the new building of the Harvard Medical School, which is in the left foreground.

When he read of Mr. Frost's adventure, he perceived its implications and at once began to investigate it — first, by satisfying himself that Mr. Frost had told the truth, and next, by making clinical observations in Dr. Morton's office on the manner in which patients behaved after they had been put to sleep by the new process.

Soon the combination of Morton, Tenney and Bigelow was so well established that Morton considered himself justified in calling on Dr. Warren. He stated that he believed that a means for preventing pain in surgical operations existed, that he had

*This is the first printed account giving any details of the operation. Its typographical errors make it all the more interesting. Dr. George Hayward was the surgeon on the hospital staff next in seniority to Dr. J. C. Warren. Dr. Charles F. Heywood was the surgical intern. "Haywood" represents a reasonable cross between the two names. "The McLean Hospital" was probably meant to be printed "the McLean Street Hospital." Mr. Tenney probably wrote this note, and Dr. Gould was probably the respected physician referred to as being present; he lived across the street from Morton and was one of his friends.

†A copy of this contract is in the Boston Medical Library.

used it successfully in the extraction of teeth and that he hoped Dr. Warren might be willing to try it on a larger scale at the Hospital. Dr. Warren finally consented,* and having made up his mind, did much as any of us would do today: he told his house-officer what was in the offing and suggested that he be on the lookout for a suitable case. This must be a patient requiring a relatively minor operation that should be sufficiently uncomfortable so that relief from pain through the use of Dr. Morton's preparation — if this were possible — would be striking. And thereupon he turned his mind to more entertaining matters.†

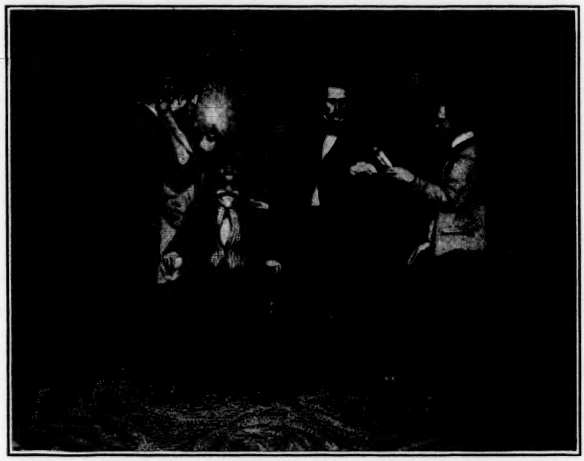


FIGURE 2. *The First Use in Boston of Ether as an Anesthetic Agent. This half-tone illustrates the extraction performed on Mr. Frost and is reproduced from* Trials of a Public Benefactor, *by N. P. Rice (New York: Pudney and Russell, 1858).*

For some time Dr. Warren had been considering the formation of a club where new ideas as they came along could be discussed intelligently by a representative group of men. At last he determined to hold a trial meeting of such a prospective organization and therefore invited to his house seven carefully selected friends: Messrs Abbott Lawrence, Francis C. Gray, Theophilus Parsons, Martin Brimmer and George Darracott and Drs. Charles T. Jackson and Augustus Gould. Like Warren himself, they were prominent in their various fields and interested in Boston and progress, and moreover, they included a pleasant diversity of talent and age so that conversation developing among them should be interesting. Of the medical men, Dr. Jackson was perhaps the first scientist of his day — a chemist, physicist, geologist and mineralogist, highly thought of by his contemporaries. Dr. Gould was equally unusual; besides being a wise physician, he was well known as a conchologist and zoologist. One can judge, from its original composition, that the Thursday-Evening Club — as the organization came to be called — proposed to be no flippant affair but that its meetings were to be conducted with all possible seriousness and dignity.

In the meantime, on October 13, Gilbert Abbott, a twenty-year-old printer who had the misfortune of having a tumor on his neck, chanced to enter the hospital. Obviously, an operation would be to his benefit, and his seemed about the type of case that Dr. Warren was on the lookout for. The upshot was that Dr. Morton received the following letter:

Dear Sir, —

I write at the request of Dr. J. C. Warren, to invite you to be present on Friday morning, at ten o'clock, to administer to a patient, then to be operated on, the preparation which you have invented to diminish the sensibility to pain.

Yours respectfully,

C. F. HEYWOOD
House Surgeon to the Massachusetts General Hospital

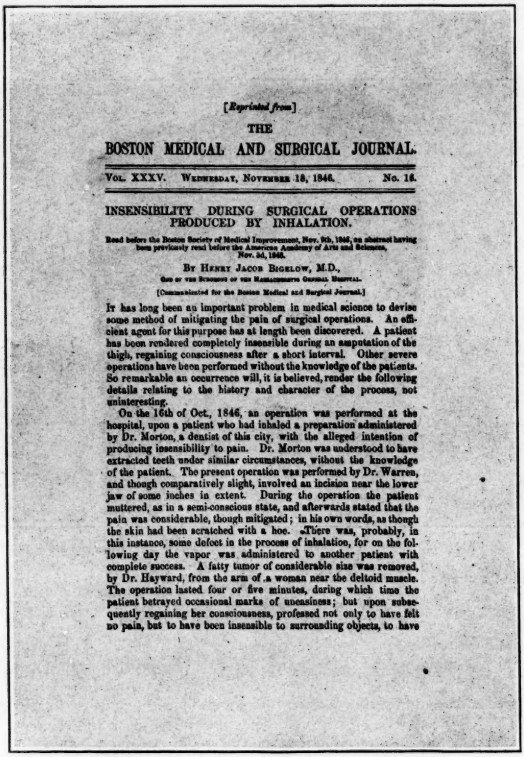
*Dr. Morton's advertisement in the *Transcript* for October 11 gives Dr. Warren's name as a reference. This suggests that Dr. Warren may have observed the new method in operation.

†The best accounts of Dr. Warren's part in the introduction of ether are found in the biography of Warren[1] and in his own article.[2]

And on October 16 Dr. Warren made the following entry noted in his diary:

> In the morning went to the Medical College to make some experiments on the renovation of decayed bones with glue. White glue gives, in some cases, a beautiful appearance; and the black gives great strength.
>
> Did an interesting operation at the Hospital this morning, while the patient was under the influence of Dr. Morton's preparation to prevent pain. The substance employed was sulphuric ether.*

*Both Dr. Warren and Dr. Hayward believed that the effect of ether in this case was incomplete; the suffering, however, was less than it would have been under ordinary circumstances, and the result was satisfactory enough to justify further trial. For Dr. Hayward's recollection of this occasion see Hayward.[3]



[*Reprinted from*]

THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XXXV. WEDNESDAY, NOVEMBER 18, 1846. No. 16.

INSENSIBILITY DURING SURGICAL OPERATIONS PRODUCED BY INHALATION.

Read before the Boston Society of Medical Improvement, Nov. 9th, 1846, an abstract having been previously read before the American Academy of Arts and Sciences, Nov. 3d, 1846.

BY HENRY JACOB BIGELOW, M.D.,

ONE OF THE SURGEONS OF THE MASSACHUSETTS GENERAL HOSPITAL.

[Communicated for the Boston Medical and Surgical Journal.]

IT has long been an important problem in medical science to devise some method of mitigating the pain of surgical operations. An efficient agent for this purpose has at length been discovered. A patient has been rendered completely insensible during an amputation of the thigh, regaining consciousness after a short interval. Other severe operations have been performed without the knowledge of the patients. So remarkable an occurrence will, it is believed, render the following details relating to the history and character of the process, not uninteresting.

On the 16th of Oct., 1846, an operation was performed at the hospital, upon a patient who had inhaled a preparation administered by Dr. Morton, a dentist of this city, with the alleged intention of producing insensibility to pain. Dr. Morton was understood to have extracted teeth under similar circumstances, without the knowledge of the patient. The present operation was performed by Dr. Warren, and though comparatively slight, involved an incision near the lower jaw of some inches in extent. During the operation the patient muttered, as in a semi-conscious state, and afterwards stated that the pain was considerable, though mitigated; in his own words, as though the skin had been scratched with a hoe. There was, probably, in this instance, some defect in the process of inhalation, for on the following day the vapor was administered to another patient with complete success. A fatty tumor of considerable size was removed, by Dr. Hayward, from the arm of a woman near the deltoid muscle. The operation lasted four or five minutes, during which time the patient betrayed occasional marks of uneasiness; but upon subsequently regaining her consciousness, professed not only to have felt no pain, but to have been insensible to surrounding objects, to have

FIGURE 3. *Title Page of a Reprint of Dr. Henry J. Bigelow's Paper.*

This is the first publication by a Boston physician describing the use of ether. The reprint is a curiosity because it is incomplete, all controversial discussions that appeared in the original paper having been deleted.

The second operation was performed on the following day and with more striking success. Thus, ether had begun to make a little noise around Boston when the Thursday-Evening Club convened for the first time on October 27; Dr. Warren's record of this momentous occasion was as follows:

> At this meeting, the application of ether, for the prevention of pain in surgical operations, was first made the subject of discussion between Dr. Gould, Dr. C. T. Jackson, and myself; and we then learned from Dr. Jackson, that he suggested to Dr. Morton the use of ether for the prevention of pain in a patient who was to undergo a severe dental operation.

This was ether's coming-out party in Boston and the source from which Bostonians began to hear about it in an authoritative way.

Dr. Jacob Bigelow, besides being president of the Massachusetts Medical Society, was president of the American Academy of Arts and Sciences. The Academy was scheduled to hold a meeting on November 3, when Mr. Benjamin Peirce, professor of astronomy at Harvard College, was to say something about a new planet that had been interesting Boston stargazers.* At the last moment he was unable to keep this engagement, and Dr. Bigelow was compelled to find a substitute. It seemed natural to fill in with his son, who seemed to have something worth talking about. Unfortunately, there is no account of how his speech was received. The record states simply, "Dr. Henry J. Bigelow gave some account of a new process of inhalation employed by Dr. Morton of Boston, to produce insensibility to pain during the performance of operation by the dentist and the surgeon." Yet the meeting had far-reaching results; it drew the attention of another group of influential people to ether, particularly that of Mr. Everett.

The new building of Harvard Medical School was to be opened the next day, and as part of the ceremonies Mr. Everett had agreed to deliver an address. By way of preparation he admitted that he had done little more than glance over a copy of the history of the school and put together a few notes. When he heard young Bigelow at the Academy, however, he gathered that some sort of stupefying gas prepared by Dr. Morton had been used with fair success to prevent pain in two surgical cases, and he was impressed with the youthful speaker's sincerity and ability. Therefore, apparently, he decided to make a graceful and noncommittal allusion to this in his speech; his words concerning the importance of training in relation to medical research are of special interest:

> It is not to be expected that discoveries like Jenner's can frequently reward the investigations even of the most sagacious. To exterminate a disease which has desolated mankind for centuries, is of course an achievement not to be often repeated. But discoveries and improvements of all kinds are likely to keep pace with the advance of education in general and professional studies. The greater the number of individuals whose perceptive powers have been awakened and guided by sound studies and wise discipline, the greater the probability that some sharpened glance will penetrate the yet undiscovered mysteries of nature.

A few days later, young Dr. Bigelow[4] read his paper, "Insensibility during Surgical Operations Produced by Inhalation," before the Boston Society for Medical Improvement. This was an amplification of what he had said at the Academy so that one can judge why Mr. Everett found his remarks noteworthy. Bigelow told of his experiments with ether, "the odor of which was readily recognized in the preparation employed by Dr. Morton." He reviewed the literature concerning its properties. He described Morton's technic for its administration and the way people reacted when they inhaled it. He stated that its use was clearly adapted to operations that were brief in duration, whatever their severity; he was less certain that it was applicable in operations requiring complete muscular relaxation, such as the reduction of dislocations and the repair of strangulated hernias; conceivably it might prove safe to administer for a long period and to produce prolonged narcotism.

The paper was printed as the leading article in the November 18 issue of the *Boston Medical and Surgical Journal* and was the first published description of the use of ether by any Boston physician.† But that particular date is worth remembering for another reason: it was the day on which Mr. Everett's daughter developed a toothache. He took her to Dr. Morton and described the visit in the following words‡:

> She was thrown into a state of insensibility by breathing the vapour§ of ether prepared in some undivulged way. The operation of inhaling the gas lasted about two minutes and the state of unconsciousness as much more. Some loss of time took place in consequence of her jaws being rigidly closed. The operation had to be repeated three times in consequence of the tooth breaking to pieces; and the process of digging out the roots would have been extremely painful if not performed in a state of unconsciousness. No unpleasant consequences of any kind followed the operation.

Mr. Everett had been prevailed on to publish the address that he had delivered so offhandedly at the opening of the medical school. He decided to change the final proof, which was still before him; referring to the paragraph on medical research, he added the following footnote:

> I am not sure that since these remarks were delivered, a discovery has not been announced, which fully realizes the predictions of the text; — I allude to the discovery of a method of producing a state of temporary insensibility to pain, by the inhalation of a prepared vapor. A full account of this discovery is given in a paper, by Dr. Henry J. Bigelow, in the Boston Medical and Surgical Journal, for the 18th of November, 1846. Dr. Bigelow ascribes its first suggestion to Dr. Charles T. Jackson, and its application under his advice, for the purpose of mitigating pain, to Dr. W. T. G. Morton, dentist, both of Boston.
>
> I witnessed a very successful instance of the application of the prepared vapor, on the 18th of November; and was informed at that time by Dr. Morton, that he had employed it in several hundred cases of dentistry. It has also been made use of with entire success at the Massachusetts General Hospital, and elsewhere in Boston, in capital operations of surgery. The few cases of failure may perhaps be ascribed to irregularities in the process of inhalation, or to peculiarities of temperament or constitution on the part of the patient.
>
> I understand that great confidence is placed in this discovery, by the most distinguished members of the medical

*This information is found in Mr. Everett's diary, deposited in the Massachusetts Historical Society.

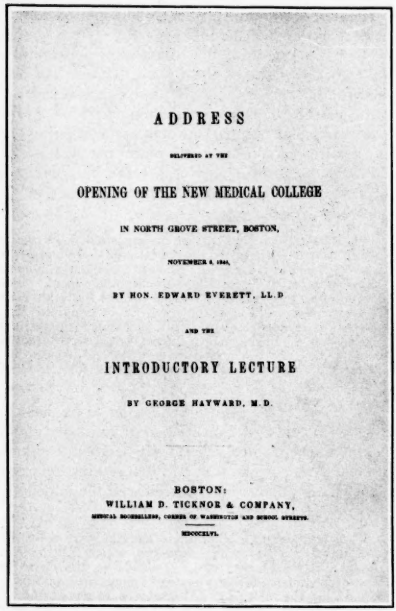
†The *Boston Medical and Surgical Journal* for October 21, 1846, reported, "Strange stories are told in the papers of a wonderful preparation, in this city, by administering which, a patient is affected just long enough to undergo a surgical operation, without pain." Apparently, the editor, Dr. J. V. C. Smith, took little stock in the early rumors.

‡This episode is described in Mr. Everett's diary.

§The spelling of "vapor" varies. Mr. Everett spelt it "vapour" in his diary and "vapor" in his published address. Dr. Jacob Bigelow in his letter to Dr. Boott also used the former style.

profession of this vicinity; and that they are disposed to regard it as an effectual method of inducing complete insensibility under the most cruel operations, by means easily applied, entirely controllable, and productive of no subsequent bad consequences. It seems not easy to overrate the importance of such a discovery.

A Cunard mail steamer was due to sail for England about the first of December. Among a cargo of other valuables, she carried copies of Mr. Everett's address and of Dr. Bigelow's paper, as well as letters describing the use of ether from Mr. Everett, Dr. Jacob Bigelow and Dr. Warren to sundry people of influence in Great Britain and France.



ADDRESS

DELIVERED AT THE

OPENING OF THE NEW MEDICAL COLLEGE

IN NORTH GROVE STREET, BOSTON,

NOVEMBER 4, 1846,

BY HON. EDWARD EVERETT, LL.D

AND THE

INTRODUCTORY LECTURE

BY GEORGE HAYWARD, M.D.

BOSTON:
WILLIAM D. TICKNOR & COMPANY,
MEDICAL BOOKSELLERS, CORNER OF WASHINGTON AND SCHOOL STREETS.
M.DCCC.XLVI.

FIGURE 4. *Title Page of Mr. Everett's Address. According to the* Boston Medical and Surgical Journal, *the address was clothed in beautiful language and was much admired for its elevated sentiments and elegance of expression. Mr. Everett believed that it was the first nonprofessional publication in which the use of ether was mentioned. The address was printed at the request of the students at the Harvard Medical School, and is misdated, presumably owing to their inexperiness in proofreading.*

Dr. Francis Boott,* an Englishman who graduated from Harvard College in 1810, was a contemporary and friend of Dr. Jacob Bigelow and Mr. Everett. After finishing college he returned to England, obtaining his medical education in Edinburgh. He practiced for a few years in London but soon inherited money enough so that he could do as he pleased. He retired from practice and took up botany as a hobby, but kept his hand on medical politics in general, particularly as they concerned University College, where he had taught and where he continued to serve on the Council. He had a talent for friendship; he had traveled across the Atlantic often enough so that he was in constant touch with Cambridge and Boston contemporaries.

The American mail arrived about the middle of December, and Dr. Boott† opened a letter from his friend Jacob Bigelow with usual relish and studied its contents with particular care. The letter read as follows:

November 28, 1846 Boston

My dear Boott:

I send you an account of a new anodyne process lately introduced here, which promises to be one of the important discoveries of the present age. It has rendered many patients insensible to pain during surgical operations and other causes of suffering. Limbs and breasts have been amputated, arteries tied, tumors extirpated, and many hundreds of teeth extracted without any consciousness of the least pain on the part of the patient.

The inventor is Dr. Morton, a dentist of this city, and the process consists of the inhalation of the vapour of ether to the point of intoxication. I send you the *Boston Daily Advertiser*,‡ which contains an article written by my son Henry, and which is extracted from a medical journal, relating to the discovery.

Let me give you an example. I took my daughter Mary, last week, to Dr. Morton's rooms to have a tooth extracted. She inhaled the ether about one minute, and fell asleep instantly in the chair. A molar tooth was then extracted, without the slightest movement of muscle or fibre. In another minute she awoke, smiled, said the tooth was not out, had felt no pain, nor had the slightest knowledge of the extraction. It was an entire illusion.

The newspaper will give you the details up to the date, since which other operations have been performed with uniform success.

Since college days Dr. Boott had known that anything Dr. Bigelow said was always true. On the morning after he had received the letter he got hold of some ether, Miss Lansdale, who had a molar tooth of which she wished to be rid, and Dr. Robinson, a dental surgeon; in the presence of Mrs. Boott and his two daughters, he etherized the lady and watched Dr. Robinson extract her tooth, painlessly and without difficulty. He then reported the matter to his friend Robert Liston, who, in turn, realizing that anything Dr. Boott said was true, immediately used ether at the University College Hospital in a case of thigh amputation and in a case requiring removal of the great-toenail, in both cases with excellent results.

I believe that this account outlines the pathway through which the discovery of ether reached Eng-

*A sympathetic biography of Dr. Boott is found in the Harvard Archives, Widener Library, reprinted from *The Gardener's Chronicle*, 1864.

†From a description of this event§ it is clear that Dr. Boott was one of those who received a copy of Mr. Everett's address.

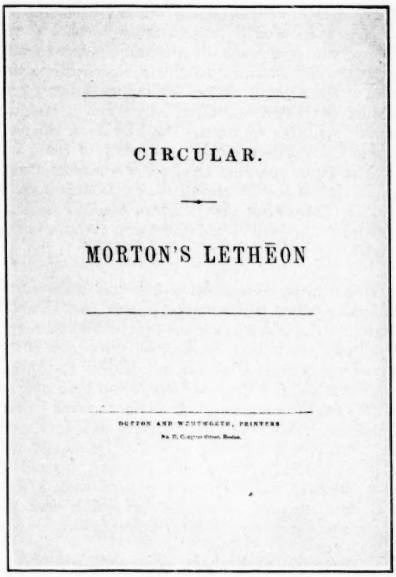
‡The *Boston Daily Advertiser* for November 19 reprinted Dr. Bigelow's article in full. This is the first complete and contemporaneous reprint with which I am familiar. The *Lancet* for January 2, 1847, reprinted the *Boston Daily Advertiser's* reprint.

land: by chance, because several isolated and inconsequential events in Boston combined to make many different persons of importance conscious of a great medical event; by friendship, because older men like Dr. Jacob Bigelow, Dr. Boott, Mr. Everett and Dr. J. C. Warren knew and trusted each other and were glad to lend their influence in promoting something of general usefulness that had been originated by younger colleagues.

Ether reached France in a similar manner. Dr. John D. Fisher,* an imaginative man who never followed the beaten track, had graduated from Harvard Medical School in 1825. He had gone abroad when he obtained his degree and had studied in Paris under Louis. When he returned to Boston to practice, he took an active interest in progressive medicine, thinking especially of people less fortunate than himself. He made several useful and original contributions: among others, that of auscultation of the skull as a diagnostic method. He is known most widely as founder of the Perkins Institution for the Blind. Apparently, he did no formal teaching at the medical school, although in contemporary catalogues he is listed as "preceptor" — one of those practitioners who were chosen to be responsible for supervising both the professional studies and the moral characters of students placed in their charge.

Francis Willis Fisher,† his nephew, was assigned to him in 1842; young Fisher was a mysterious person about whom little is known beyond the fact that he attended the Boston Latin School, took an active part in the affairs of the Boylston Medical Society as an undergraduate, joined the Massachusetts Medical Society as promptly as he could, and emulated his preceptor on graduation by going to Paris for final polishing.

Dr. John Fisher had been appointed to the staff of the hospital in 1846 and was interested in ether; he wrote to his nephew about it shortly after the second operation had been performed. Francis† remarked that he would have been cautious in giving credence to the report he received had it reached him through the pages of a medical journal; coming to him from his former medical instructor, he could entertain no doubt of its truth. He attempted at once, without success, to excite Velpeau and others of his surgical teachers to try it. He next determined to etherize himself, before an appropriate audience, while he had a tooth pulled; this effort failed because he reached only the stage of excitement, and his obstreperousness was unpleasant. Finally, in January, when Parisian doctors were beginning to receive English reports and to use ether with no great confidence, a Boston inhaler came to his hands complete with sponge and valves. He demonstrated this to Roux and Velpeau, was invited by each of them to use the instrument in their clinics — which he did with perfect success — and henceforward, as he said with understandable complacency, the method took full possession of the French medical mind so that the inhalation of ether came to be employed in all surgical operations. Friendship of a teacher for his student and the chance arrival of a Boston ether inhaler in France at the moment it was needed seemed the most active catalysts there.



CIRCULAR.

MORTON'S LETHĒON

BUTTON AND WENTWORTH, PRINTERS

FIGURE 5. *Title Page of the Third Issue of Morton's* "Letheon." *This probably appeared in December, 1846. It is a bibliophilic rarity, since only three copies have been found: one in the Army Medical Library, one in the Treadwell Library of the Massachusetts General Hospital and one among the Warren papers in the Harvard Medical School Library.*

Curiously, the introduction of ether into the medical practice of the United States proved more difficult.‡ There were at least three understandable reasons for this: conservatism, distance between medical centers so that news traveled slowly and, above all, skepticism. Morton and Tenney were eager to publicize their work and possibly their way of doing it failed to attain general approval. They

*For a pleasant biography of Dr. Fisher see Channing.[8]

†What little is known of Dr. Francis Willis Fisher is found in the archives of the Harvard Medical School, the records of the Boylston Medical Society and Harrington's *History of the Harvard Medical School.*

‡A committee of the American Medical Association consisting of G. W. Norris and Isaac Parrish, Philadelphia, John Watson, New York City, A. L. Peirson, Salem, and Hugh H. McGuire, Winchester, Virginia, wrote an excellent account of the development of anesthesia.[8] Dr. Peirson, a pioneer in the use of ether, lost his life five years later returning from the New York meeting. Shortly after passing Norwalk the railroad car in which he was sitting plunged through an open drawbridge into the water below.

kept track of the literature on the use of ether as it accumulated and issued informative circulars from time to time in the form of a small pamphlet entitled "Letheon." The various issues of this unusual publication were more or less like present-day commercial advertisements and had little effect. The *Boston Medical and Surgical Journal* printed more serious articles, but these reached few physicians south of Massachusetts. By degrees, however, the fame of ether after its trip abroad came back to the United States through British and French medical journals. With human perversity physicians on this side of the Atlantic seemed willing to accept a procedure advocated in Boston only when it had the stamp of foreign approval. The New York Hospital began to use ether in the early spring of 1847, and a little later, surgeons at the University of Pennsylvania and the Jefferson Medical College took it up. By 1848, when the American Medical Association met, ether had come into its own over the entire world.

* * *

To my mind, this curious cycle of episodes is worth remembering. Chance played a large part in making the Ether Dome as famous as it is: if Mr. Tenney had happened to be a less aggressive reporter, if the Thursday-Evening Club had not held its first meeting when it did, if Professor Peirce had been able to fill his engagement to speak at the meeting of the Academy, if Mr. Everett's daughter had developed her toothache a few days earlier, if Dr. Boott had gone to college in Cambridge, England, instead of in Cambridge, Massachusetts, or if Francis Fisher had been assigned to another preceptor than his uncle, the whole story of ether might have been different. And without friendship — Mr. Tenney's friendship for Dr. Morton, Dr. Warren's friendship for the Bigelows, Dr. Jacob Bigelow's friendship for Dr. Boott, Dr. Boott's friendship for Robert Liston, and Dr. Fisher's friendship for the Hospital and his nephew — Mr. Eben Frost's toothache might have been of no great interest to anyone but himself, and the first use in Boston of ether as an anesthetic agent might have been insignificant.

Even in these days when science has complicated practice and research is so complex, it may be well to keep in mind the importance of two such simple imponderables as chance and friendship. Chance will always play an unpredictable part in shaping new ideas; medical investigators must not be led astray by the lure of intricate machinery but must ever be alert to use their eyes to see unexpected, apparently insignificant occurrences that may later prove to be great events. Friendship will always be necessary to our art so that as many people as possible may work together to develop its future for the greatest common good.

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THE HOSPITAL — A LOOK AHEAD*

Some Aspects of Clinical Investigation

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CLINICAL investigation has been conducted in the Massachusetts General Hospital with ever-increasing frequency and significance. In the future the hospital will continue to be a leader in such work, which will be developed more than ever before. From research of today come new forms of treatment tomorrow. It is treatment that patients are particularly concerned about. The physician, by investigative means, learns much about the etiology and diagnosis of disease, and investigative studies give information of a wide sort to the physician and the scientist.

This type of work is often done in conjunction with medical schools, but the work is frequently done entirely at the hospital by clinicians. Research of the clinical sort begins at the bedside. The needs of the patient urge the physician to make his scientific inquiries. Indeed, it may be said that research begins in the library, for the literature must be explored to determine what has already been accomplished. A good working library like the Treadwell Library is of great value to the hospital, but the members of the hospital must also make use of such libraries as the Harvard Medical School Library and the Boston Medical Library, where many books and scientific journals are at hand.

A clinical investigator cannot be defined by a rule of thumb. He must be an able clinician and one with wide interests who understands human beings and can act wisely for all the multiple aspects of a given patient. He must have an ardent desire to seek knowledge by scientific methods, as well as a wish to advance knowledge so that succeeding investigators will find the results nearer the ultimate goal.

Descriptions of previously unrecognized conditions often depend on the observation of several cases and not on planned investigation. The collection of proper information over long periods to formulate knowledge about prognosis, which in many chronic conditions is imperfect, represents a simple type of investigation. There is need for more accurate work of this sort. The question of the origin or cause of disease is of particular importance to the clinical investigator and may require intricate and complicated studies.

The clinical investigator can study the problem by various methods at his command and with the aid of laboratories of various sorts. The search for truth regarding the laws of Nature is fundamental. One of the things that may be of great advantage in future investigation is co-operation among physicians, scientists and all types of scholars trained in different ways and at different sorts of institutions. Such co-operation, when spontaneous, is fruitful, but when compulsory, may be sterile.

This hospital will become even more of an educational center to train young men to be all types of physicians and surgeons. Among these men are future general practitioners. Such persons will always be of great value to the community and deserve to be looked up to.

The hospital will, of course, always continue to take care of patients and will investigate disease with increasing frequency, and although today it may be regarded as a consulting center, in the future it will certainly be considered a vital consulting center. The hospital is not competing with doctors; it is indeed helping them.

One must expect more full-time men at work at this hospital. I emphatically do not mean men who are not permitted to see private patients.

The importance of public education has been growing, and the hospital may be expected to take a leading part in such work. A preventive-medicine clinic is something we may expect. Preventive work has a broad conception — it must include all activities to increase health. Doctors must plan to construct as well as to reconstruct health. When the patient reports to the Out Patient Department in the future, he may even ask to go to the preventive-medicine clinic, and the public must be trained to appreciate the significance of preventive medicine, so that people will voluntarily go to such a clinic.

A growing understanding of the numerous factors that cause disease will determine in part the future course of preventive medicine. There is the prevention of disease and of health depreciation by the attainment of better general health. The chief objectives of preventive medicine have been to reduce things harmful in the environment and to increase the body's immunity.

The control of infectious diseases is increasing, and yet devastating epidemics occur. Chronic progressive diseases characteristically frequent in the

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later years of life will continue to assume greater and greater significance. Infections of childhood will become rarer perhaps because of better control and better treatment. It may even be supposed that cancer could be controlled by the injection of some mysterious chemical comparable to insulin in diabetes mellitus or penicillin in pneumococcal pneumonia.

The degenerative diseases such as those with high blood pressure will constitute an ever-increasing threat to national health. To be sure, these diseases have occurred for many thousand years, but their social importance is new. There is now a rapidly increasing number of elderly people, who are presenting new problems. The hospital will concentrate more and more on problems of health in later years of life, but will continue to attack diseases frequent in youth.

Effective prevention is usually possible only when the whole history of causation is known. The etiology must often be considered to include multiple causative influences.

Personal preventive medicine supplements public-health efforts. The early discovery of a disorder that will be more frequent in the future will allow the maximum benefit from therapy. Comprehensive periodic health consultations are essential — not a purely routine physical examination but a study that comprises a detailed history and complete consideration of the patient as a person, including the analysis of such habits of living as diet, rest and work. Thoroughness and individualization will always be needed.

Education in health for all age groups and by every means available will be an increasingly important medical problem. Sensationalism must be avoided. "The future of preventive medicine is bright whatever its precise course may be," Stieglitz[1] said, adding: "Medical science can *give* health to no one, but it is daily becoming more competent in guiding those who wish to *earn* health." Good health can be bettered, and man made to live longer; these are among the effects of the prevention of actual disease.

There are types of clinical investigation that demand organized study by institutions so that data can become available over many years and generations before final analysis is made — for example, creative work to determine the exact qualitative and quantitative influence, on thought and social life, of dietary factors alone or in combination and under varying climatic environments. The history of the people of the world could perhaps be written in terms of diet, as Zinsser[2] has done in terms of epidemics. Initiative, progress, success and the happiness of a people tend to go hand in hand with an abundance of food and a good diet.

Adequate and good food is fundamental to health. The most fertile field in the world of medical research today is nutrition. Nutritional, especially vitamin, deficiency leads to ill health and distinctive diseases. Niacin, for instance, prevents pellagra, but mild deficiency of various vitamins may lead to chronic malnutrition, although the patient may take a sufficient number of calories not to lose weight. Nutritional studies regarding the lack of food elements, the faulty distribution of food and the great value of proper food for children must in future be a primary concern.

It is quite possible that more vitamins will be identified. Little is known regarding the taste appeal of foods, and information of this sort lies ahead. I wonder why some people really like liver and others dislike it. Others object to kidneys or oysters, whereas some think they are delicious.

The composition of foods should be known. Such studies may relate to enzymes and their mechanisms, which are not familiar subjects at present. Much lactose in the diet may increase the synthesis of riboflavin, but it may decrease that of other factors. Fat may reduce the production of riboflavin in the gastrointestinal tract. Natural diets may give effects distinctly different from those of synthetic diets, but it is the natural diet that man uses. The world is full of food potentialities, and the anticipated demands for foods of superior nutritive quality need re-evaluation.

An adequate dietary history is difficult to obtain, and yet it reveals a great deal about the nutrition of the patient. In the future, customs may change as they have in the past hundred years — fresh fruit is vastly more frequent, today, and red meat is rarer. Greater attention should be paid to dietary histories and to the importance of the effects of foods. One cannot feed by pure chemistry — the diet may be varied and yet deficient. A patient may be ashamed to admit that his diet is poor. This may be due to eccentricity, lack of teeth or ignorance, and the role that such difficulties play must be appreciated.

One must distinguish between what the community has to eat and what the individual has. The patient may be a fussy, finicky eater and may say about certain foods if the question is brought up, "The family have them but I do not eat them." Indeed, social adjustments may be vital before the correct food has been obtained or digested. It should be remembered that to order a diet is one thing but to cure a patient is another. A proper diet of natural foodstuffs is all that is necessary for prevention of disease caused by faulty nutrition.

It must also be realized that little is known about optimal nutrition as opposed to usual nutrition. The former should be the goal — not merely adequate nutrition.

Rising income is associated with increased consumption of milk, fruit, eggs, vegetables and meat and with better growth in children and improved general health. Such foods are the protective foods — the ones rich in vitamins, minerals and first-class

proteins and fruit. These foods are not luxuries but necessities.

Elvehjem[3] has noted that diets containing 9 per cent of casein produce good growth but that when 6 per cent gelatin is added, poor growth results. Tryptophan or protein low in tryptophan or nicotinic acid counteracts this retardation. Thus, poor-quality proteins may in the future be regarded as more harmful than a diet low in protein.

The methods used in the diagnosis of subclinical deficiencies in human beings obviously need new and improved chemical measurements. Mild deficiencies are not obvious, and may be difficult to detect. Tests of various kinds will be improved and developed to aid in the understanding of such conditions. Hyperthyroidism, tuberculosis, pregnancy and the like may increase the need for certain dietary factors and may lead to suboptimal nutrition. Nutritional deficiency in man is of a multiple nature.

The relation of nutrition to dental caries needs much study. Dental caries is the most widespread nutritional defect; one or more nutritional factors involved may be harmful, or the lack of a factor or factors may be causative. Diets high in fermentable sugar may induce dental caries, and increased intakes of fat and protein minimize dental caries. The relation of nutrition to resistance to diseases and to infectious processes also needs further study.

The essential trace elements, such as cobalt and zinc, that occur in living matter but whose importance is unknown stand as a challenge to physiologists and nutritionists. It is recognized, however, that men working in cobalt (radioactive) and pitchblend mines frequently develop bronchiogenic carcinoma.

One must recognize such work as that of Rhoads,[4] in which indol causes no anemia in dogs with proper diets but induces severe anemia when the animals are given black-tongue diets. Butter yellow is tolerated by normal animals, but if the vitamin B complex level is low, cancer develops. Rhoads has also shown that dietary constituents such as riboflavin and casein protect animals against the carcinogenic effects of butter yellow (*p*–dimethylaminoazobenzene).

Cancer research is a great responsibility that confronts scientific medicine. Cancer is a disease predominant in the later decades of life. There has been great improvement in the methods of diagnosis and treatment of internal cancer, and yet the death rate per million population has been increasing. People must learn to seek competent medical advice when an early suspicious sign or any abnormality that might predispose to the disease is noticed. Prompt and effective treatment for cancer is essential.

There is often no indication of why a cancer develops. Occasionally, the occurrence of chronic irritation of potential tumor sites is well recognized, as in the mouths of tobacco chewers. Cancer may involve almost any part of the body, but the digestive tract is usually affected.

One of the causes for the neoplastic state seems to be viruses.[5] Some of the viruses are products of disordered cell metabolism, and others are living entities. Tumors induced in mice by methyl cholanthrene are not influenced as those resulting from butter yellow are by the addition of one or more substances of a similar sort in the diet. In such cases it does not seem that living viruses play a role. The high incidence of liver cancer and cirrhosis in the African Bantus and the poor diet consumed by these people suggest a causal relation. Whatever the cause of cancer may be, a great many studies are needed to determine clearly the fundamental aspects.

Disorders of the blood must not be forgotten in clinical investigative studies. Leukemia is considered by some to be comparable to cancer. No one has ever recovered from this disease, but x-ray and allied therapy is palliative. Chemotherapy may offer some hope. Investigators would like to identify a specific component of the cancer cell and of the leukemic cell. Indeed, what is the difference between a leukemic and a normal cell? For some mysterious reason the blood cells in leukemia grow in a purposeless manner. A radioactive atom might be incorporated in a leukemic cell, in the hope that in some manner leukemia would be vanquished.

Certain anemias also need elucidation. The first evidence that there are two distinctive components of liver extract effective in nutritional macrocytic anemias came from the observations of Wills[6] on monkeys. In these animals, in which anemia had been produced by the feeding of a defective diet similar to that of patients with tropical macrocytic anemia of pregnancy in India, a highly purified liver extract effective in pernicious anemia was found to be ineffective. This finding led to a similar demonstration of the inefficacy of purified liver extract in human patients. The cases in this group include certain patients with macrocytic anemias of the tropics and of pregnancy, as well as so-called "refractory anemias" with megaloblastic bone marrow. Watson and Castle[7] have studied this problem. Whether such patients require the active principle of liver extract that is effective in pernicious anemia, as well as an additional factor present in less refined liver extract or only the latter material, is unknown. As yet, it has not been determined whether folic acid, present in only trivial amounts in liver extract, is as effective in these cases as it is in pernicious anemia.

Rheumatoid arthritis is being studied expertly here by Dr. Bauer and his associates. The nature and course of this disease necessitate a detailed clinical and laboratory study over a long period. Rheumatoid arthritis is a disease of young adults and often continues throughout life. It is more

frequent in women than in men and more prevalent among the poor. It may begin insidiously or abruptly. Symptoms may disappear for several years, but recurrence is the rule. States of anxiety may precipitate an attack. The patients are apt to suffer from mental depression. This disease is of national importance because, although seldom fatal, it cripples many.

The factors regulating effusions in rheumatoid arthritis and those regulating the rate of formation and composition of synovial fluid are little known. Studies on mucin, which is obviously involved in rheumatoid arthritis, are needed. Ascorbic acid may play a role in the destruction of mucin. Greater knowledge should be acquired regarding the pathogenesis of the subcutaneous nodules characteristic of the disease. Studies of this sort as well as the psychiatric aspects of patients with arthritis — indeed, matters pertaining to all aspects of the disease — demand investigation.

Physics will concern investigators much more than in the past. Physicists and other natural scientists may even aid in the study of medicosocial problems. The electron microscope gives information about viruses and the diseases they cause. It can scarcely be foretold what will be discovered concerning the origin of living matter.

* * *

Many diseases and problems besides those mentioned will be studied at this hospital, and undoubtedly great progress will be made under the able leadership of Dr. J. H. Means and his successors. One can never tell when the cure for some dread disease is right around the corner.

The public must be educated to look on research as an essential activity and to understand the practical application and the enormous cost of undertaking investigation. No member of a community passes through life without receiving directly or indirectly the benefits of research done in such a great hospital as this. We all owe much to the Massachusetts General Hospital.

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ATELECTASIS AS A FACTOR IN THE MEDICAL TREATMENT OF PLEURAL EMPYEMA: THE NECESSITY OF COMBATING ATELECTASIS BY REMEDIAL BREATHING EXERCISES

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THE therapeutic management of empyema of the pleura has been revised because of the recent favorable experiences with penicillin. The treatment by open drainage after rib resection has been the generally accepted procedure in adults in practically all cases except those due to tuberculosis, actinomycosis and malignant neoplasm: this approach was based on the experiences in World War I and the report of the American Empyema Commission (1918), which clarified the rules for correct timing. Since then chronic empyemas have been seen less often than formerly.

Chronic empyemas are usually grouped in two categories: cases in which the original condition has never been recognized and a collection of pus has remained after the disease had been overcome by the body; and those in which the condition is a sequel of an acute empyema treated in the conventional way with the effect of overcoming the disease but without effecting the complete evacuation or resorption of the pus. The unsatisfactory results in this group are usually due to too early removal of the drainage tube, to an improperly placed opening so that a pool of pus remains at the bottom of the pleural cavity, to encapsulated pockets or to a foreign body — usually a tube — in the empyema cavity. In both groups, those with and without surgical treatment, the persistent empyema may be maintained by incomplete expansion of the lung, owing to a bronchopleural fistula, thickening of the pulmonary pleura and atelectatic fibrosis of the lung. In pleural exudates and empyemas, fibrin is deposited on the pleura in varying amounts. The usual roentgenologic terminology is inaccurate in that the deposits are often described as thickened pleura. In the early stages these masses of soft-tissue density represent nonorganized fibrin deposits that undergo later organization through the ingrowth of capillaries from the underlying pleura. Thus, the roentgenologic term is meant to comprise both conditions, since there is no way of distinguishing the nonorganized layer of fibrin deposit, still

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capable of being resorbed, from the final organized product, which represents pathologically thickened pleura.

It has been shown, clinically and experimentally, that the parietal and the pulmonary pleuras behave in a different manner in pleural inflammations, whether they are pneumococcal or tuberculous, serofibrinous or purulent.[1, 2] In the majority of cases, whereas thick layers of the deposits are found

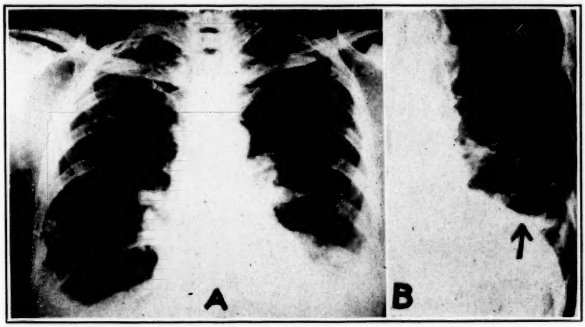

FIGURE 1. *Pleural Effusion before* (A) *and after* (B) *Thoracentesis. Note the plate-shaped area of obstructive atelectasis* (*arrow*) *in the latter roentgenogram.*

along the chest wall, only thin deposits or none at all are observed on the visceral pleura. This does not hold true for the posthemothoracic empyemas that develop after blood coagulums have been laid down more or less uniformly. A somewhat different behavior of the pleural surfaces, however, is recognizable even in such cases. As pointed out by Samson et al.[3]: "For some reason as yet unexplained, the peel over the parietal pleura is always thicker . . . than that on the visceral pleura." The thinness of the deposits on the pulmonary pleura suggests that thickening of the pleura probably plays a minor role in the maintenance of the collapsed state of the lung in the usual nonhemothoracic empyema. It appears that, in the majority of cases, atelectasis is more important in hampering the re-expansion of the lung.

According to the textbooks, the atelectasis occurring with pleural effusion is of the compression type. The extrinsic pressure squeezes all the air from the alveolar sacs until they collapse and the capillary bronchioles also collapse. The matter, however, is not so simple as that. There is ample evidence from pathological and roentgenologic observations that, in addition to compression atelectasis, obstructive atelectatic processes in varying degrees occur. Although the compressed lung should respond readily to the expanding pull as soon as the pleural effusion begins to be resorbed, the obstructive atelectatic areas resist more obstinately the expanding traction because the factors causing the obstruction, such as kinks of the bronchi and accumulated secretion, are apt to persist. The presence of obstructive atelectasis, even if local and patchy, counteracts the tendency toward re-expansion. As a consequence of the collapse, the moist surfaces of capillary bronchioles come in contact with each other, and great force is needed to overcome the surface tension to separate them again.

Pathological evidence of obstructive atelectasis with pleural effusions has seldom been described, although it is easily observed. At autopsy in cases with moderate pleural effusion, the atelectatic portions of the lung are identified by the depression of the surface, dark color and firmness. Quite often, the borderline toward the aerated area coincides with the pattern of the interlobular septums on the lung surface; moreover, isolated or multiple lobules, which are elevated, pale and air filled in the midst of otherwise atelectatic areas, are observed and on the other hand, beyond the compact atelectatic zone, isolated atelectatic lobules, depressed, dark red and firm in the midst of a well aerated section, frequently occur. When atelectatic areas are cut through, the surface exposed is not dry and gray, as would be expected in compression atelectasis, but dark red and moist, with much fluid oozing out, thereby showing the picture of obstructive or resorption atelectasis. In other cases the edge or even larger portions of the middle and lower lobes have been turned up, owing to the buoyancy of the lung floating in the fluid. Sometimes such a turned-up edge is found to be fixed by recently formed adhesions, which prevent the restoration of the normal position; the kinked bronchi do not straighten

out, and the parenchyma served by them remains in its atelectatic condition. These observations on the gross morphologic appearance of the lung in pleural effusion show that, in addition to compression, obstructive atelectasis — due to collapse and kinking of bronchi and to retention of secretion in lung. If the lung persists in its atelectatic condition for a longer time, however, it is apt to suffer irreparable alterations. Pleurisy is not restricted to the superficial layers of the pulmonary pleura. In chronic empyema the inflammation extends into the superficial interlobular septums and deeper,

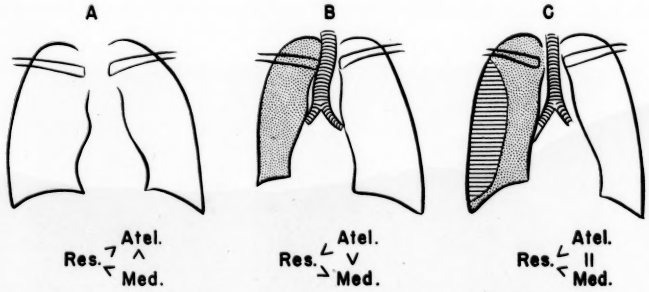

FIGURE 2. *Diagram Illustrating Three Possible Events in the Course of Pleural Effusion without and with Persistent Atelectasis.*

Res. = *resorbing pull*; Atel. = *atelectatic resistance of the lung against its re-expansion*; Med. = *rigidity of the mediastinum resisting lateral shift.*

In A, *the resorbing pull is large, and the mediastinum is stable. The atelectatic lung is easily re-aerated, and complete recovery results.*

In B, *the atelectasis is rigidly maintained, the resorbing pull is strong and the mediastinum is movable. Resorption of the exudate, persistent atelectasis and deformity of the chest result.*

In C, *the atelectasis is rigidly maintained, and the mediastinum is immobile; a residual empyema pocket and atelectatic induration of the lung result.*

the poorly ventilated dependent portions of the lung — occurs.

Roentgenologic observations also confirm the presence of obstructive atelectasis in pleural effusion. More extensive collapse of one lobe or lobar segment, as well as unusual arrangement of the pleural fluid in the absence of pleural synechia, is analogous in appearance and origin to the selective collapse in pneumothorax and is due to obstructive atelectasis. If the mediastinum is pulled to the side of the effusion during the period of resorption or following a thoracentesis, the presence of obstructive atelectasis is indicated. Furthermore, I have observed plate-shaped areas of obstructive atelectasis immediately after thoracentesis (Fig. 1).

The functional aspect of these facts has recently been confirmed. In an analysis of the effects of pleural effusion on respiration, Altschule and Zamcheck[4] showed that the functional reserve (supplemental) air, as well as the complemental air, increases only moderately eighteen hours after thoracentesis. Restoration of the vital capacity to its normal value takes about a month, indicating that great resistance must be overcome to reventilate the atelectatic lung.

This is the situation so long as no irreparable pathologic changes have occurred in the collapsed larger interstices. Lindblom[5] summarized his careful studies by pointing out that the longer the duration and the greater the purulence of a pleural effusion, the more extensive the pleurogenic interstitial pneumonia and the resulting fibrosis.

Atelectasis persisting for a long period, even without supervening inflammation, may in itself incite fibrosis of the lung. It has been shown that the occasional edema of the interstices may persist for a long time, resulting in fibrosis. In this way the interlobar septums and the perivascular and peribronchial interstices are widened. The involved area of the lung loses its plasticity and becomes more rigid.[6] Residual or supervening infection in the lung or bronchi may add to the permanent loss of elasticity of the involved portion of the pulmonary tissue.

All these developments initiated by long persistent atelectasis have a crippling effect on the lung; moreover, they prevent the re-expansion, adequate diminution of the residual empyema cavity and final resorption of the empyema.

The aim of the treatment of pleural empyema is twofold: to combat the inflammatory disease with all its complications and to rehabilitate the lung. The classic surgical procedure combined with supportive medical treatment is directed at both aims.

Purely medical treatment with bacteriostatic or antibiotic drugs may stop the activity of the disease, and the body may or may not successfully handle the residual empyema. The problem of residual empyema similarly exists if the pleural taps are not continued with enough frequency, or if it is impossible to withdraw the fluid further, because it becomes inspissated or encapsulated in pockets

means, mobilized by the body to resorb the residual empyema, must overcome the tendency of the lung to maintain its collapsed condition. Since this resorption occurs in a relatively rigid cavity, the thoracic cage, a considerable pull must be exerted on the lung; for the present purpose, this may be called the "resorbing pull." The increased intrinsic resistance of the lung to re-expansion was briefly

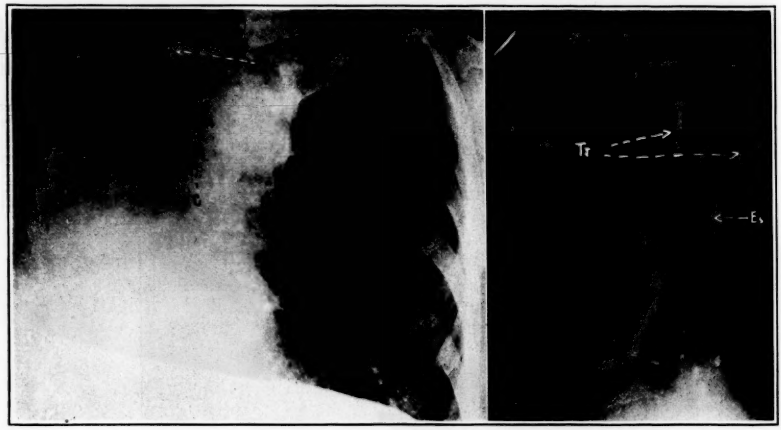

FIGURE 3. *Case 1.*

The roentgenogram on the left shows postpleuritic contraction of the right lung (Tr. = *trachea*; C. = *carina*; l. L. = *border of the left lung herniated into the right half of the chest*). *The x-ray film on the right is a bronchogram of the right half of the chest, revealing obliteration of most of the smaller bronchi and bronchiectasis of the few patent ones* (Tr. = *trachea*; Es. = *esophagus*).

that cannot be reached with the needle. I have recently seen a series of chest roentgenograms in such cases in which residual pockets of retained empyema, thickening of the pleura and deformation of the chest resulted from penicillin treatment without or with insufficient evacuation of the empyema.

A knowledge of the mechanical forces involved is essential to a better understanding of the occurrence of residual empyemas and to the planning of support for the body in its endeavor to resorb the fluid.

There have always been cases of pleural empyema in which the disease subsided and healed in spite of conservative treatment, incomplete surgery or no therapy. Some healed with few sequelae, others with permanent damage to the underlying lung, others with residual chronic empyemas, and still others with gross chest deformities; there were often combinations of all these sequelae.

There are basically three forces that, in combination, control the rate of resorption of pleural effusions. The structural, physical and biochemical

mentioned above. For simplicity, the factors opposed to the expansion of the lung may be considered under the label "atelectasis." The half-chest cage in which the resorption is to occur is made up of the rib cage, the diaphragm and the mediastinum. The mediastinum and diaphragm can be pulled into the half chest to a considerable degree. Also, approximation and bending of the ribs may contribute to the diminution of space. Again, for simplicity, this rigidity of the chest wall opposing its being pulled into the chest cavity may be regarded as the rigidity of the "mediastinum" against lateral shift.

The action of the three forces is presented diagrammatically in Figure 2. In the resorption of a large pleural effusion three different developments are possible. In the first place the resorbing pull is large, the atelectatic resistance of the lung against expansion is weak and the mediastinum and the other constituents of the half chest wall are stable and firm. This represents the ideal development. The exudate is resorbed, and the lung is completely

expanded without displacement of the mediastinum and deformity of the chest. Secondly, the atelectatic condition of the lung — or fibrous or pleural rigidity — cannot be overcome. The resorbing pull, although strong, cannot expand the lung but is powerful enough to attract the mediastinum, as well as the diaphragm and ribs. This occurs in cases in which the pleural effusion is finally resorbed, the mediastinum is displaced, the chest is grossly deformed and the lung remains in atelectatic fibrosis with or without secondary changes, such as bronchiectasis. The third possible development occurs when the resorbing pull is too weak to overcome the atelectatic rigidity of the lung and also too weak to move the mediastinum, the diaphragm and the ribs. The pleural cavity is not reduced in size, and the empyema is not resorbed. This situation is quite similar to that in any abscess in a rigid cavity.

The following cases represent, respectively, the second and third developments and a combination of all three.

Case 1. Eighteen years before he came under observation this patient had had a pneumonia and pleural empyema, which had been treated conservatively, without open drainage. His condition did not change during the following 6 years. There was maximal retraction of the right half chest. The right lung, collapsed by the large empyema at the time of the acute disease, remained in its atelectatic condition and became fibrosed; the lobar bronchi were patent and ended in few large bronchiectatic cavities (Fig. 3). The mediastinum, however, yielding to the absorption pull, shifted over to the right, and the left lung, overlapping into the right half chest, occupied the space made free by the contracting right lung. Thus, the right pleural cavity gradually decreased in size and allowed the empyema to be resorbed.

Case 2. This patient with tuberculosis of the upper lobe was treated with artificial pneumothorax. Pleural exudate developed, filling the pleural cavity, and the refilling of the pneumothorax was discontinued after 1½ years. The patient recovered completely and was re-examined repeatedly, the findings always remaining unchanged. Seven years later she suffered a serious fall, following which she started coughing up large amounts of purulent fluid. X-ray examination showed a collapsed, condensed lung and a hydropneumothorax in the rigid pleural cavity (Fig. 4). This was a typical history of internal perforation of a chronic pleural exudate. The lung, collapsed during the early period of the pneumothorax treatment, underwent fibrosis and became inexpansible. Although the disease healed, the exudate could not be reduced in size owing to the rigidity of the collapsed lung and the fixation of the mediastinum.

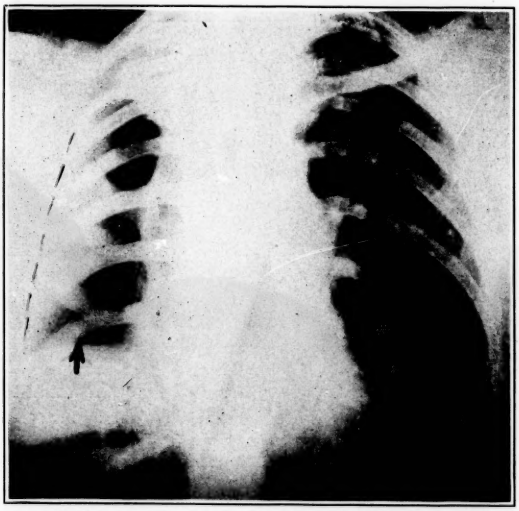

Figure 4. *Case 2.*

This roentgenogram shows spontaneous hydropneumothorax after perforation into a bronchus of a chronic pleural empyema. The arrow indicates the fluid level.

Case 3. This patient had a lobar pneumonia followed by empyema in 1927, incompletely treated by surgery. For many years after clinical recovery the chest condition did not change. Re-evaluation 16 years later revealed a pleural cavity of medium size, filled at the left base with thick sterile pus, and a left lower lobe that was collapsed and fibrosed, as clearly shown by the approximation and shortening of the moderately dilated bronchi (Fig. 5). The complete resorption of the empyema had been mechanically prevented by the atelectatic fibrosis of the lower lobe.

The sequelae of incomplete or absent expansion of the lung have occasionally been effectively prevented or combated by the institution of breathing exercises (Hofbauer[7]). If the pain and the reflex inhibition are overcome, if the weakened respiratory muscles of the involved half chest are put to active work and if the atelectatic lung is forcefully reventilated, it recovers its elasticity, expands and resumes its full function, facilitating mechanically the resorption of the residual pleural exudate. Such a regime has met with two adverse factors. The duration of the disease was long under incomplete surgical and conservative medical treatment, and there was ample time for the development of irreparable alterations in the lung and pleura; furthermore, the systemic signs and symptoms of active disease subsided slowly and almost imperceptibly, making it difficult to determine the time when active exercises could safely be begun.

With the present-day penicillin treatment both these difficulties are eliminated. The disease manifested by systemic signs and symptoms has a much shorter course and is usually overcome within one or two weeks. The temperature and pulse rate return to normal levels, the appetite returns and the patient feels well. There may still be dyspnea, owing to the restricted breathing surface. There has not been much time for the establishment of irreparable damage to the lung and pleura. In addition, because of the rapid and more dramatic improvement, the time to start with active breathing exercises can be more easily chosen. Whether the patient will be restored to active physical work or fitted again for full respiratory capacity by breathing exercises may be determined according to the individual case. Such exercises are well known to the physiotherapists; they have been used successfully in European countries in the past, and more recently

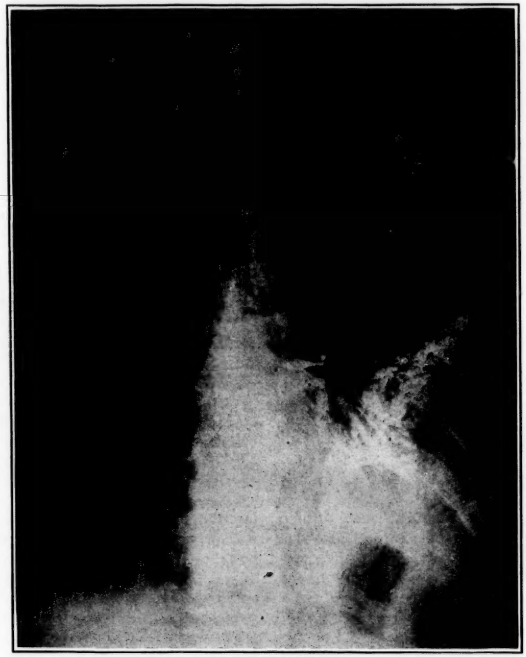

FIGURE 5. *Case 3.*

This film shows a residual pleural empyema, sixteen years after incomplete surgical treatment. The bronchogram reveals the collapsed atelectatic lower lobe and the lingula of the upper lobe.

they have been given greater attention in the United States. Harken,[8] in a recent review of the activities of the Thoracic Center of a United States Army hospital group in England, placed strong emphasis on the remedial breathing exercises for chest injuries.

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Under the influence of penicillin it appears that the future treatment of pleural empyema will be, for a large number of cases, nonsurgical. Whether or not the systemic administration of penicillin is reinforced by local injection of the drug into the empyema cavity, the most complete evacuation of the empyema by repeated pleural taps should be attempted. After the successful treatment of the disease, care of a residual sterile empyema should not be left to the body. Empyema should not be considered cured until there is complete re-expansion of the lung. Resorption is often delayed or impeded by atelectasis of the lung or — to a lesser degree — fibrous deposits on the pleura. Re-expansion and restoration of the ventilatory capacity of the lung mechanically facilitate the resorption of exudate and prevent or reduce permanent invalidity of the lung and chest deformities. This reactivation of the lung can be promoted by proper breathing exercises.

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MEDICAL PROGRESS

ELECTROCARDIOGRAPHY*

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IN 1940 a progress report was published to help orient physicians in general regarding the value and limitations of electrocardiography in the diagnosis and evaluation of heart disease.[1] The present article is not strictly a progress report. Rather, it is designed for those who have some basic knowledge of the subject but who have lacked time and opportunity to keep abreast of the recent developments in the field. No attempt has been made to review completely the voluminous number of articles that have been published in recent years; only a few major points are considered.

A recent development has been the perfecting of an electrocardiographic apparatus that inscribes the final record directly on paper instead of through the medium of photography. The practical advantages are obvious in providing a tracing that is immediately available at the bedside and obviates the trouble and expense of photographic developing. It remains to be seen whether technical difficulties and objections have been sufficiently overcome so that these machines will be reliable and sturdy enough for clinical use. All of them employ the audion-tube method of amplification, and most of them inscribe the record by a heated stylus that melts a wax or plastic surface on the paper. At least one, however, utilizes an ink-writing device. There are at least four different models of these new machines currently on the market.

In the past few years emphasis in electrocardiographic studies has to some extent shifted. The period from the early 1920's until late in the 1930's was the halcyon time for descriptive, empirical electrocardiography. Many valuable data were amassed concerning electrocardiographic variations in different types of heart disease, and this technic in the assessment of various arrhythmias was particularly explored in voluminous detail. Moreover, during this period, the value of the electrocardiogram in the diagnosis of myocardial infarction was increasingly established.

In recent years more and more scrutiny has been given to the basic electrical principles involved and to correlations between clinical findings and experimental work. In a way this is a harking back to much of the fundamental work that was done in the field, especially by Sir Thomas Lewis. The painstaking work of Wilson and his collaborators[2, 3] through the years on the laws governing the electrical effects produced by the heart beat and especially on precordial and direct leads has now received the general recognition it merits. Today, no cardiac

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specialist would be considered really competent who was not conversant with some of the electrical principles underlying clinical electrocardiography. Bayley[4] has presented a review of some of these basic electrical correlations, including vector analysis.

Electrocardiographic Variations in the Absence of Organic Heart Disease

It has been recognized for a long time that serious heart disease can exist with a normal electrocardiogram. In a recent study of 722 patients with heart disease, 223 had normal electrocardiograms.[5] The converse situation has been less appreciated, but numerous recent articles testify to the relative frequency of abnormal tracings in persons with no detectable heart disease, as well as of the various extracardiac conditions that can alter the record. Thus, in observations on 500 unselected young adults, of whom only 14 had any clinical evidence of heart disease, Viscidi and Geiger[6] found that 48.8 per cent had normal electrocardiograms. Most of the abnormalities were, it is true, minor. In a study of 1000 healthy aviators, Graybiel et al.[7] reported that the PR interval was less than 0.12 second in 13 cases and longer than 0.20 second in 16. The QRS interval exceeded 0.10 second in 35 cases, including 1 case of frank left bundle-branch block and 2 of the Wolff–Parkinson–White pattern. Other deviations from the normal were also reported. Stewart and Manning[8] noted essentially similar results. In an analysis of electrocardiograms of 500 Canadian flyers 18 per cent were found to be borderline or abnormal and thus confirmed a previous study.[9] Abnormal PR intervals were observed in 5 per cent, abnormal Q waves in 2 to 3 per cent, and diphasic or negative T_1 or T_3 waves in 0.5 to 1 per cent.

Elevation of the diaphragm and change of posture may alter the form and produce inversion of the T waves in the standard leads as well as the precordial leads.[10, 11] This occurs especially in the upright position. It is seen particularly in persons with neurocirculatory asthenia.[12–16] One explanation is that the inversion is due to a change in the position of the heart, but Wendkos[15, 16] is of the opinion that it is the result of heightened sympathetic activity in the upright position. Some support for his thesis is found in the fact that the assumption of the upright position may shorten the PR interval.[17, 18] Intra-abdominal disease can alter the form of the electrocardiogram,[19] and even the eating of a meal may produce minor changes in the P and T waves,[20] which in borderline records might easily be interpreted as being due to acute heart disease. The difficulty of distinguishing between acute upper abdominal disease and acute cardiac accidents is well known, as is the frequency with which they may coexist.

What then are the bounds of normal in electrocardiography, since records that fall outside conventional standards may be obtained from apparently normal persons? There is no final answer. These standards must still be accepted as being the best available. It is well to appreciate, however, that the electrocardiogram should be interpreted with caution; it is a useful adjunct in clinical diagnosis, but its findings should always be related to the clinical picture. As many mistakes are made from an overenthusiastic and undercritical reliance on electrocardiography as from a failure to utilize this technical aid.

It has been known for a long time that electrocardiographic changes occur in the course of rheumatic fever, and hence the electrocardiogram has been relied on a good deal in the differential diagnosis of this disturbance. Is it reasonable to assume, therefore, that when electrocardiographic abnormalities occur in patients following acute respiratory infections, rheumatic fever is present? Rantz, Boisvert and Spink[21] found that such changes occurred in 10.8 per cent of 185 patients with acute hemolytic streptococcus throat infections. These changes consisted of prolongation of the PR interval or of sharp inversion of the T waves, often in all three leads. These authors believed that rheumatic fever only follows hemolytic streptococcus infection and that the many manifestations that may occur, such as arthritis, fever and carditis, should be grouped together under the term "poststreptococcal state." It is the opinion of many authors that such electrocardiographic changes following infections are often nonspecific.[22, 23] They have been found during and after pneumococcal pneumonia — a disease that is seldom associated with rheumatic fever.[24] Sometimes, following such infections of varied etiology, clinical myocarditis or pericarditis develops, and this may even be fatal.[25–28] The administration of the sulfonamides has on occasion been accused of producing myocarditis or diffuse vascular disease.[29–33] In such cases electrocardiographic changes may be the clue to the developing disease. Therefore, it can be seen that, useful as this technic is in the diagnosis of rheumatic fever, caution is necessary because of the possibility that nonspecific changes in the tracings may occur.

Many drugs may alter the form of the electrocardiogram. For a detailed enumeration of the abnormalities that may follow drug administration the reader is referred to the table in the text of Graybiel and White.[34]

Multiple Precordial Leads

Electrocardiography has to some extent developed the hard way. The three standard leads were introduced first, and for years electrocardiographic interpretation was based on analyses of these leads alone. The standard leads, however, are complex in that they represent the difference between the electrical potentials at two points of the body remote from the heart — for example, Lead 1 is the difference be-

tween the left arm and the right arm. Hence, the interpretation of such records is not simple, although it is made easier by the assumptions implicit in the Einthoven triangle hypothesis. Unipolar leads that register the potential at one point and in which the second or indifferent electrode is at zero potential offer many advantages. Precordial and other chest leads, although not strictly unipolar, at least approach that situation. By the taking of such records at numerous points on the surface of the chest (and also on occasion from the esophagus), more exact information may be elicited regarding the presence and localization of cardiac lesions than can be obtained from the standard leads. A committee of the American Heart Association[35] has recognized the value of such multiple precordial leads by recommending that they be taken, as suggested by Wilson, at six points across the chest. If it is not feasible to take the six leads, the committee recommends that at least three — for example, C_1, C_3 and C_5 — be obtained; some workers prefer C_2, C_4 and C_5. There is no agreement about which indifferent electrode is the best — that in the right arm, the left leg, the Wilson central terminal, the right scapular and so forth. Most authorities, however, accept the central terminal electrode of Wilson[36] as the one that most nearly approaches zero potential throughout the cardiac cycle.[2, 3, 36–39] Wolferth,[40] who does not accept the validity of the Einthoven triangle hypothesis, disagrees.

In general, what type of information do multiple precordial leads furnish that cannot be gained as satisfactorily from the standard leads in addition to a single apical lead with which doctors are much more familiar? Their chief value is, of course, in the diagnosis of the presence and extent of anterior myocardial infarction. The earliest evidence of this condition may appear in the leads over the right side of the precordium and may continue to be limited to this area.[2, 41] The findings in these leads may permit a definite diagnosis that might be missed altogether or could only be suspected from the standard leads or a single apical lead.

Multiple precordial leads are also useful in diagnosing bundle-branch block, particularly incomplete or atypical patterns.[2, 3] In such leads there is a delay in the activation of the ventricle on the side of the block that will be registered by broad, notched or bifid R waves in the precordial leads over the ventricle on the blocked side.

Some assistance in the diagnosis of ventricular hypertrophy can also be obtained from multiple precordial leads.[2] The patterns seen in the standard leads may be confused with those in bundle-branch block or in normal hearts showing axis deviation, or the picture may be complicated by a combination of abnormalities. In normal hearts, even with axis deviation, the precordial leads are normal. With hypertrophy, on the other hand, the R wave is frequently unusually high in the leads taken over the enlarged ventricle, with a small S wave, whereas the inverse pattern is found over the opposite side.

When a combination of abnormalities is present, such as myocardial infarction in addition to bundle-branch block or ventricular hypertrophy, and in other situations in which the standard leads are confusing, multiple precordial leads often enable a definite diagnosis to be made.[2, 3]

Unipolar Extremity Leads

Since the introduction of unipolar extremity leads[42] and the extensive studies of Goldberger[43–46] on this subject, there has been a gradually increasing appreciation of their clinical value. Such leads are of considerable assistance in judging the position of the heart in the thoracic cavity.[2] It has been shown that extremity leads register predominantly electrical potentials from the surface of the heart nearest them. Thus, the right-arm lead is usually negative, since facing it are the great valvular orifices, which tend to convey the potential of the ventricular cavities. The patterns of the left-leg and left-arm leads will resemble those found in precordial leads over the right or left ventricle, depending on whether the heart lies transversely or vertically. Occasionally, confusing patterns are present in the standard limb and precordial leads, as in anterior myocardial infarction with changes in Lead 3. In such cases the position of the heart may be responsible, and help may be obtained from unipolar extremity leads.

Extremity leads may also be of value in the diagnosis of posterior myocardial infarction when the standard leads are equivocal and the precordial leads are normal, and in other conditions in which a prominent Q_3 is present that may or may not represent heart disease, as mentioned below. Goldberger[44] has discussed their usefulness at considerable length.

Deep Q_3 Pattern

It is often of considerable practical importance to know whether variants seen in the standard leads are due to shifts in the electrical axis of the heart or to pathologic changes. This is especially true with the so-called "deep Q_3" pattern, which may be a normal variant seen in transversely lying hearts or the only sign of recent or old posterior myocardial infarction. Esophageal leads most readily give the answer,[47] but such leads are often impracticable.

Pardee,[48] who originally pointed out the significance of the deep Q_3 pattern, stated that for such a wave to have a pathological import, it must have an amplitude at least 25 per cent as great as that of the largest QRS complex, and he also noted that in normal persons it tended to diminish with descent of the diaphragm. Lyle[49] observed that the disappearance of Q_3 on inspiration is proof that it is positional, although the converse does not hold. Ungerleider[50] did not agree with Lyle. Lyle also found that unipolar extremity leads were helpful in evaluating the size of the true Q wave. Myers and

Oren[51] employed the left-leg lead in helping to distinguish between abnormal and normal Q_3 patterns, and found that when Q_{LL} had 25 per cent or more of the amplitude of R_{LL} a diagnosis of posterior infarction could be suspected. Goldberger,[52] in an extensive article on the differentiation of normal from abnormal Q waves, came to the conclusion that posterior infarction was usually present if the Q_{LL} was 40 per cent or more of the entire QRS complex or 60 per cent of R_{LL} and was 0.04 second or more in duration, in association with a downward T wave and provided the QRS_{LL} pattern was not of the QS or W type. Ungerleider,[50] in a recent review of 1355 cases, found that one or more of the following abnormalities were present in 94 per cent of cases with a deep Q_3 due to coronary disease, as compared to only 24 per cent of normal subjects: weight less than 5 per cent overweight; absence of S_1; Q_2 more than 1 mm. in depth; T_2 less than 1 mm. tall; Q_3 of 0.04 second or more in duration; Q_3 of 75 per cent or more of the tallest R wave in the limb leads; and deep inversion of T_3, exceeding 25 mm. Ungerleider was of the opinion that there is no need to employ unipolar leads in routine electrocardiography. Nyboer[53] took exception to these criteria, since he found them present in a substantial percentage of normal persons, especially those with horizontally lying hearts. He suggested that two or more of these impairments be required in the evaluation of the Q_3 and furthermore that chest and other exploratory leads may be required.

Main Deflection Downward In All Standard Leads

Goldberger[54] has discussed the possible causes of electrocardiograms in which the main ventricular deflections are downward in the three standard leads. These are as follows: marked right-axis deviation; anterior infarction combined with marked left-axis deviation; posterior infarction combined with marked right-axis deviation; and combined anterior and posterior infarction. The last three of these show characteristic Q waves, which, in distinction to the S waves of axis deviation, help to distinguish them. Assistance may also be obtained from unipolar extremity leads.

Atypical Myocardial Infarction and the Endocardial Electrocardiogram

In 1938 Wood, Wolferth and Bellet[55] described an electrocardiographic pattern present in infarction of the lateral wall of the left ventricle, consisting of depression of the RST segments in Lead 4 and usually in Leads 1 and 2. Thomson and Feil[56] found 19 cases of lateral infarction in 136 cases examined at autopsy. Nine were recent, and in 4 the pattern described above was present. In this connection attention should be called to an experimental study by Wolferth et al.[57] on positive and negative displacements of the RST segments in which positive displacements are classified as primary because they occur as the result of abnormal current flow originating in close relation with the exploring electrode, whereas negative displacements are secondary because they result from the abnormality originating in other parts of the ventricle. The negative RST segments may occur when there is involvement extending to the epicardial surface at a point away from the exploring electrode, as in lateral infarction, or when the lesion is confined to the endocardial aspects of the ventricular wall, even when this underlies the exploring electrode. Bayley[58] has cited a case in which injury was confined to the endocardial surface of the left ventricle that showed RST depression, and he, like the others, mentioned that such findings are seen in myocarditis, atypical myocardial infarction and angina pectoris. In two recent reports electrocardiograms were obtained on human beings with the exploring electrode introduced into the auricular and ventricular cavities by means of cardiac catheterization.[59, 60] The findings confirmed experimental work on animals regarding the nature of the endocardial electrocardiogram.

Pardee and Goldenberg[61] found that infarctions of the anterior wall of the left ventricle without subepicardial necrosis had atypical patterns that might resemble those described above in lateral infarctions. The typical changes in the ST segment and T wave occurred most frequently when the septum was involved, with or without necrosis of the wall of the ventricle itself.

When negative displacement of the ST segment occurs and myocardial infarction is suspected clinically, the injury may be either limited to the endocardial surface or remote from the exploring electrodes, as in lateral infarction. Help in differentiating the two may be gained at times by means of the use of precordial leads high in the chest, which may show positive displacements of the ST segment and typical changes in the QRS complex.[62]

Ventricular Hypertrophy

Another problem that vexes electrocardiographers is the determination of early degrees of ventricular hypertrophy. It is admitted that the electrocardiogram frequently gives evidence of left ventricular hypertrophy in patients with hypertension or other conditions producing left ventricular strain earlier than x-ray or other clinical measurements; but borderline cases are difficult to evaluate, since left-axis deviation is often present with normal hearts and left ventricular hypertrophy may exist with a normal axis. Indeed, in its early stages, the left axis that is usually present is probably due to the fact that the majority of such hearts lie transversely.

Mention was made above of the help to be gained from multiple precordial leads. Various investigators have laid down criteria for the diagnosis of left ventricular hypertrophy. Thus, Gubner and

Ungerleider[63] stated that left ventricular enlargement can be considered to be present when left-axis deviation occurs with any of the following: when R_1 plus S_3 equals 25 mm. or more; when there is any depression of ST_1, even as slight as 0.5 mm.; and when T_1 in less than 1.0 mm. in height. And they further state that left-axis deviation is not necessarily integral part of the pattern of left ventricular hypertrophy. White and his associates[64–66] have traced the development of the electrocardiographic pattern in patients with hypertension and compared its frequent regression after lumbodorsal sympathectomy with the lack of improvement in patients treated in other ways. They reported findings in the limb leads similar to those mentioned above. In addition, they noted that half their cases showed abnormal T waves in Leads CF_4 and CF_5, and in 24 per cent high voltage of the precordial QRS complexes existed.

Arrhythmias

Decherd, Ruskin and Brindley[67] cited a case showing interatrial block — a rare finding. A similar case has recently been seen at the Boston City Hospital.[68]

Parsonnet et al.[69] have published an elaborate classification of bigeminal rhythm in which twenty-nine mechanisms that may produce this phenomenon are described.

That cardiac arrhythmias may follow operations on the chest is becoming increasingly appreciated.[70–72] They may develop in connection with operation on the pleura, the lung or the heart. These arrhythmias may take the form of auricular fibrillation, flutter, frequent premature auricular beats, wandering pacemaker or nodal rhythm. They may occur during the operation or may be delayed for some days, and may be associated with the development of pulmonary infarction.

Evans[73] has advanced the theory that paroxysmal auricular tachycardia and flutter are the same, and that cases usually diagnosed as paroxysmal tachycardia have a 2:1 auriculoventricular block. Decherd, Ruskin and Herrmann[74] have, however, concluded from a study of momentary atrial electrical axes that in supraventricular tachycardia there is a single ectopic focus rather than a circus movement, as in auricular flutter and fibrillation.

Summary

A résumé of certain recent developments in the field of electrocardiography is presented. In particular, electrocardiographic abnormalities in persons without organic heart disease, multiple precordial and unipolar extremity leads, atypical myocardial infarction, the deep Q_3 pattern and ventricular hypertrophy are discussed.

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MASSACHUSETTS MEDICAL SOCIETY

PROCEEDINGS OF THE COUNCIL

Stated Meeting, February 5, 1947

A STATED meeting of the Council of the Massachusetts Medical Society was called to order by the president, Dr. Dwight O'Hara, on February 5, 1947, at 10:30 a.m. in John Ware Hall, 8 Fenway, Boston, Massachusetts. Two hundred and one councilors were present (Appendix No. 1).

The President announced that the secretary, Dr. Michael A. Tighe, was absent because of illness. He expressed a wish for his speedy recovery. The President announced that for the purpose of the meeting he appointed Dr. Robert N. Nye as acting secretary. This appointment was confirmed by the vote of the Council. The Acting Secretary presented the record of the Council meeting held on October 2, 1946, as published in the *New England Journal of Medicine*, issue of December 12, 1946. He moved its adoption. This motion was seconded by a councilor, and it was so ordered by vote of the Council.

Committee Reports

Executive Committee

This report (Appendix No. 2) was presented by the Acting Secretary, who moved its acceptance. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Arrangements

This report, which was submitted by the chairman, Dr. Sidney C. Wiggin, Suffolk, was as follows:

> The committee has been active since the October meeting of the Council. We have held a number of meetings, one of which was held jointly with representatives from the various sections.
>
> From that meeting, we received many suggestions as to what topics and what speakers we should have on our program next May, and we are now in the process of arranging the program, which we can promise will be an interesting one.
>
> The 1947 meeting will run for a full three days, instead of two and a half as last year, and this extra half-day will be given over to a program which will be devoted to a discussion of the accomplishments of the Massachusetts Medical Society in meeting the costs of sickness.
>
> Last year, the Committee on Arrangements, under Dr. Roy J. Heffernan, showed a profit of $5200. We may not be able to do quite so well this year as the Hotel Statler has increased our rental by 50 per cent and also decreased the number of exhibit booths that we may sell. However, Mr. Boyd advises us that he has already sold all available booths, and we are certain we can show a substantial profit in 1947.
>
> Owing to the increased length of the meeting, we have been able to set aside one evening exclusively for the Shattuck Lecture, instead of running it in with a general session, as we have had to do in recent years.
>
> The committee would appreciate any suggestions from members of the Council regarding the program.

Dr. Walter G. Phippen, Essex South, moved the adoption of the report. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Publications

This report (Appendix No. 3) was offered by Dr. Richard M. Smith, Suffolk, chairman. Dr. Smith called the Council's attention to the fact that this report contained three recommendations.

The first was that an appropriation of $5000 be set aside on which the *New England Journal of Medicine* may draw if it becomes necessary. He moved the adoption of this recommendation. This motion was seconded, and it was so ordered by vote of the Council.

The second was that a directory of the officers and fellows of the Society be published in 1947. He moved the adoption of this recommendation. The motion was seconded, and it was so ordered by vote of the Council.

The third was that the advisability of the Society's setting up a retirement plan for its full-time employees be referred to a committee of the Society, either a special committee or an existing committee, according to the desires of the President and that if the adoption of such a scheme seems desirable a specific retirement plan be presented to the Council, subject to the approval of the Committee on Finance, if the matter was not referred to said committee. Dr. Smith moved the adoption of this recommendation. This motion was seconded, and it was so ordered by vote of the Council, after the President had announced that the recommendation was approved by the Executive Committee.

Dr. Smith announced that Dr. William Dock, Director of Medicine, Long Island College of Medicine, Brooklyn, will deliver the 1947 Shattuck Lecture.

Dr. Smith moved the adoption of the report as a whole. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Public Relations

This report, which was presented by Dr. Milton J. Quinn, Middlesex East, a member of the committee, was as follows:

> The Committee on Public Relations recommends to the Council that the committee be authorized to establish a speakers' bureau.
>
> The Committee on Public Relations is not yet ready to report on the subject of a women's auxiliary to the Massachusetts Medical Society. The progress in this direction is that the committee has requested each member of the committee to canvass his district and report at the next meeting of the Public Relations Committee the sentiment in that district.

Dr. Quinn moved the acceptance of the report. This motion was seconded by a councilor, and it was so ordered by vote of the Council. Dr. Quinn pointed

out that this report contained one recommendation, namely, that the Committee on Public Relations be authorized to establish a speakers' bureau. He moved the adoption of this recommendation. This motion was seconded by Dr. Phippen.

Dr. Reginald Fitz raised the question whether or not the establishment of a speakers' bureau under the proposed auspices might hamper the Director of Medical Information and Education. The President said that this matter was brought to the attention of the Committee on Public Relations by the Secretary, who was being constantly called on to provide speakers for lay groups. He added that the Secretary found it difficult to obtain such speakers and expressed the thought that this means of valuable public approach should be on a sounder basis than heretofore existed. He added that the Committee on Public Relations agreed that a speakers' bureau should be set up, that the participating speakers in this bureau should come from all over the state and that this was an activity which belonged particularly to the committee. He said that the possibility of conflict with the newly proposed office had not occurred. In this connection he asked the Acting Secretary to read that part of the Executive Committee's report which had to do with this matter. The acting secretary said that the Executive Committee approved of the recommendation. He read the following from the committee's report:

> The Committee on Public Relations asks the privilege of organizing this movement in the Society. It would make its selection of speakers from all parts of the state. The Executive Committee also believes that by adopting this recommendation the Council would give at least some direction to the office of the Director of Medical Information and Education and that this office might, as one of its duties, work with and under the direction of the Committee on Public Relations in setting up and supervising the bureau called for in this recommendation.

Dr. Frank R. Ober, Suffolk, asked if it would not be a good idea to have the bureau set up under the direction of the Director of Medical Information and Education. At this point, Dr. Ober moved as an amendment to the recommendation that when and if a speakers' bureau is established it be organized by the Director of Medical Information and Education when and if such a director is elected. This amendment was seconded, and it was so ordered by vote of the Council. It was moved and seconded that a speakers' bureau be established. It was so ordered by vote of the Council.

Committee on Legislation

This report, which is as follows, was presented by Dr. David L. Belding, Norfolk South, chairman:

> The Committee on Legislation submits only a brief report of progress, since its activities do not begin until the Massachusetts Legislature convenes.
>
> The first meeting of the committee was held on October 16, 1946, for the purpose of organization, since two thirds of its members were newly elected. At this meeting co-chairmen and a secretary were elected; special powers were delegated to a small executive subcommittee; Mr. Charles J. Dunn was appointed legislative counsel; the budget for the coming year was drawn up; and an analysis of the Taft Bill (S 2143) by the Subcommittee on National Legislation was approved and forwarded to the Council on Medical Service of the American Medical Association. The committee was represented on October 23, 1946, at a general conference on public-health legislation sponsored by the Massachusetts Central Health Council.

Dr. Belding presented a supplementary report in which he said that his committee had examined and passed on thirty-five bills that had been introduced in the Legislature. He said that the bills which were opposed by the committee fell largely in one of three categories — those that would lower the standards of medical practice, those that would interfere with the freedom of medical research and those that would unfavorably affect the high standards at present maintained by our hospitals. He added that the Chiropractors' Bill was an example of the first, the Antivivisection Bill, of the second, and the bills that would throw open the doors of all hospitals to every licensed practitioner of medicine irrespective of his qualifications, of the third. Dr. Belding moved the adoption of the report. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Finance

This report (Appendix No. 4) was offered by Dr. Robert W. Buck, Suffolk, chairman. He pointed out that the report was purely informational. He moved its adoption. This motion was seconded, and it was so ordered by vote of the Council. Dr. Buck next presented the budget for the year 1947 (Appendix No. 5). He moved its adoption. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Public Health

This report (Appendix No. 6) was presented by Dr. Roy J. Ward, Worcester, chairman. He moved its acceptance. This motion was seconded, and it was so ordered by vote of the Council.

Dr. Ward said his report contained several recommendations, the first of which was that the Council authorize the President to appoint a subcommittee of three to act as liaison between the Society and the State Department of Mental Health. He moved the adoption of this recommendation. This motion was seconded. The president reported that the Executive Committee approved of the recommendation. It was adopted by vote of the Council.

Dr. Ward moved that the Council adopt the recommendations contained in the report of the Subcommittee on School Health. This motion was not seconded. The President said that this portion of the report of the Committee on Public Health provoked a good deal of discussion in the Executive Committee. He asked the Acting Secretary to read that part of the report of the Executive

Committee which relates to this subject. The latter read as follows:

> In reviewing this report the Executive Committee gave first consideration to that part of the report submitted by the Subcommittee on School Health. The discussion indicated that this subcommittee came into being as the result of a mandate of the Council which was motivated by a letter that Dr. Fitz received from a committee of school executives asking that the Massachusetts Medical Society set up a committee that would study ways and means of improving medical services in schools. The Executive Committee notes that the subcommittee's principal recommendation is as follows: "To establish an effective liaison between representatives of the Massachusetts Medical Society and education officials at both state and local levels." The Executive Committee is in support of this proposal.
>
> The Executive Committee notes that the subcommittee would activate this idea by (*a*) having the Massachusetts Medical Society appoint an over-all committee on school medical services and (*b*) having each district society appoint a local committee on school medical services, it being understood that each district would apply this principle according to the needs of the individual district.
>
> With regard to "*a*," the Executive Committee recommends that the word "over-all" be deleted and that the word "advisory" be substituted. The Executive Committee is impelled to this action because it believes that the latter word more clearly describes the function of such a committee and the limitations that should govern its activities.
>
> With regard to "*b*," the Executive Committee, in carrying out the same idea, recommends that the word "advisory" be placed between the word "local" and the word "committee." The Executive Committee also recommends the deletion of the following language, "it being understood that each district will apply this principle according to the needs of the individual district." The Executive Committee is impelled to this action by reason of the fact that it regards these lines as redundant.

The Acting secretary moved the adoption of the first recommendation of the Subcommittee on Public Health, with "*a*" and "*b*" as amended by the Executive Committee. This motion was seconded. Dr. Elmer S. Bagnall, Essex North, was recognized. He disapproved of that recommendation of the Executive Committee which would delete as redundant the following language, "it being understood that each district will apply this principle according to the needs of the individual district." He said that he was responsible for this language and that it was purposely used so as to permit the district committees to organize their work in a manner which would suit their individual needs. He moved as an amendment to the motion that this language be permitted to stand. This was seconded. The recommendation of the Executive Committee, subject to Dr. Bagnall's amendment, was adopted by vote of the Council.

The President called the Council's attention to the fact that this report of the Subcommittee on School Health contained thirteen additional recommendations. He said that the Executive Committee recommended that these thirteen recommendations be referred to the advisory committee heretofore authorized for further study and elucidation and that this committee's attention be directed particularly to Recommendations 11 and 12 to the end that the language of these latter recommendations be changed so as to provide that the interpretation of physical findings shall continue to be the function of the physician alone and not be shared with the school nurse. It was moved and seconded that the recommendations of the Executive Committee with regard to this part of the report be adopted. It was so ordered by vote of the Council.

The President next referred to that part of the report of the Committee on Public Health which referred to public-health personnel. This part imperatively recommended that aggressive support of Dr. Getting's proposals be given and that the aid of the Committee on Legislation be obtained in expediting his program. The report outlined these proposals as follows:

> (*a*) To raise the salary level of the professional personnel engaged in public health on a state and local basis.
>
> (*b*) To institute a sanitary code.
>
> (*c*) To provide for subsidization of local health departments when, as and if they meet standards as to personnel and program content.
>
> (*d*) To promote town unions of adequate size (at least 20,000 population) to support a modern public-health and school-health program at a per capita cost of $1.50 to $2.50 exclusive of tuberculosis and communicable-disease control and exclusive of garbage collection.

The president asked that that part of the Executive Committee report dealing with this subject be read. The Acting Secretary read from the report as follows:

> The Executive Committee notes that that part of the report dealing with public-health personnel, if approved by the Council, would commit the Society in a manner in which it should not be committed. It therefore recommends that the Council take no action on this matter on the grounds that the subject is beyond the scope of the Society.

Dr. Roy J. Ward was recognized. He said that he vigorously objected to the conclusion arrived at by the Executive Committee in this matter. The State Department of Public Health, he added, established many years ago largely through the influence of this society, was in danger of losing its efficiency, if not actually breaking down, through its inability to pay salaries to its personnel in keeping with those prevailing in other states or in industry. He pointed out that other states, notably New Hampshire, already had a sanitary code. He said that the recommendations of the Committee on Public Health were in accordance with a request of the American Medical Association. Finally he expressed the thought that the Executive Committee could not have been cognizant of all the facts on this subject when it arrived at its conclusions. Dr. Ward moved the adoption of the recommendations contained in that part of the report of the Committee on Public Health dealing with the subject under discussion. This motion was seconded.

Dr. Elmer S. Bagnall, in speaking in support of the motion, quoted Dr. Lewis H. Bauer, trustee of the American Medical Association, as follows:

Training of public-health officials is important, and when they are trained they should be adequately compensated. At the present time many of these officials do not receive the income of men engaged in private practice or often in other fields of medicine. The implementing of this second point is by means of legislation.

Dr. Fremont-Smith, Suffolk, expressed the thought that the figures $1.50 and $2.50 appearing in proposal "*d*" should be eliminated, it being out of place for the Massachusetts Medical Society to go into such financial details. Other than this he thought the Society should support the proposals.

Dr. Donald Munro, Suffolk, said that, while he favored the support of these proposals, such support mplied an obligation on the Society's part to say whence the money necessary to carrying them through was coming. He expressed the thought that the Society was not in a position to meet such an obligation.

Dr. Lester M. Felton, Worcester, said that the councilors of the Worcester District Medical Society, at a meeting held previous to this one, declared themselves as opposed to the implied recommendation of the Committee on Public Health. He added that it was a bad precedent to create and that if it were created, medical personnel employed by the state generally might request and reasonably expect similar backing.

Dr. Reginald Fitz, Suffolk, asked if there were bills along the lines of discussion now before the General Court and if so what was the opinion of the Committee on Legislation with regard to them.

Dr. Belding said that there were certain bills of this character before the Legislature. He mentioned a bill that would set up a sanitary code and said that his committee had favored it. He added that there were innumerable other bills that were largely departmental in character. The Committee on Legislation had taken no action on these bills, although it was in sympathy with the principles contained in many of them, because it believed that it was unwise to spread its activities out too thinly lest its effectiveness and strength be correspondingly weakened.

Dr. Richard M. Smith said he would like to endorse what Dr. Ward had said and to emphasize the fact that the Commonwealth cannot have good public-health service unless those who render the service are adequately compensated.

Dr. Vlado A. Getting, Middlesex South, was recognized and spoke as follows:

I should like to state that I am appearing here not for any personal gain but in the interests of the people of the Commonwealth. In the first place, any increases in salaries that are contemplated would amount to less than 0.5 per cent of the total state budget. It is the duty of the Legislature, the Great and Honorable General Court of Massachusetts, to find ways of raising money. It is the duty of the medical profession to give leadership and to give guidance to the General Court in matters of public health, and it is not the duty of the Society or of the Department of Public Health to tell the General Court how to arrange its tax structure.

I should like to call the attention of members of the Council to the Society's bulletin *Digest, By-Laws, Code of Ethics and Medical Defense Act of the Massachusetts Medical Society*. There are many references to public health, but I shall refer to only one. On page 38, Chapter IV, Section 1, it states: "Physicians, as good citizens, and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should co-operate especially with the proper authorities in the administration of sanitary laws and regulations."

In the Department of Public Health there are at present fifty vacancies. The average salary for a doctor in this department is $4600, a level that is thirty-ninth on the scale of all the states in the Union. And if you add the territories and cities, we would be about fiftieth. There was a time when we were leading among the state health departments in this country. We are now very much of a borderline state. We have only one physician in the Division of Communicable Diseases, and only one in the Division of Venereal Diseases. With only one exception there is not a medical division or department in which there is a qualified assistant director ready to take over.

The situation is tragic. I have advised the officers of the Society on numerous occasions of the needs of the Department. We have referred to you from time to time our policies and procedures for your advice and endorsement, and have obtained them. I have been informed by the officers from time to time that the co-operation between the Department and the Society is the greatest it ever has been. Sympathy, however, never saved a patient's life. The Society takes pride in having created the Department of Health. It is a dying department, and one that needs prescribing. It needs help.

So far as legislation is concerned, only one bill has been introduced this year, and that has to do with the sanitary code. The help that is needed is not in the appearance formally before a legislative committee, but an action in conference with members of the Ways and Means Committee and with the Governor and his advisers. It is my conviction that unless we can obtain qualified men and unless we can prevent the further depletion of our doctors, we will be faced with a truly critical situation.

The only physicians whom we have been able to employ in the last two or three years are men who have a retirement from the Army or Navy or women who have families and can work part time.

I entered the Department of Public Health in 1938, and to the best of my recollection, I am the last physician to have entered that department who had had any training in public health and who wished to make a professional career of public health. That is how bad the situation is.

The programs that are listed here are, as a matter of fact, in accordance not only with the code of the Society but also with our code of ethics, yours and mine. They are in accord with the program that has been put out by the American Medical Association, which the Executive Committee recommends that you accept, because that is contained in the first portion of this report and reads as follows: "That the trustees of American Medical Association be urged to use all appropriate resources and influences of the Association to the end that . . . complete coverage of the Nation's area and population by local, county, district or regional full-time modern health services be achieved."

I have only one further thing to say. If we lose momentum, the Department becomes impotent; there is only one other thing to do and that is hire substandard men — graduates of unapproved schools and refugees.

No one knows what is going to happen in Washington, but if the Taft Bill or any other similar bill is passed, the Department of Public Health is going to be administering agent here. And if any of you think that even now the Department does not have a truly significant influence on medical practice in Massachusetts, I invite you to come up there for a day and view some of the things that go on.

We want to work with the medical profession. We need your support. We cannot have good public health unless the doctors in Massachusetts support the Department of Public Health.

The motion was adopted by vote of the Council.

Committee on Postwar Planning

Dr. Howard F. Root, Suffolk, chairman, presented this report (Appendix No. 7). Dr. Root moved the acceptance of the report. This motion was seconded, and it was so ordered by vote of the Council. The report reviewed the accomplishments of the committee. It indicated that the committee regarded its work as finished. It expressed the belief that certain of its subcommittees should be continued as special committees. With the latter in mind, Dr. Root moved that the Council authorize the creation of a special committee to be known as the Committee on Postgraduate Medical Education, that this committee consist of seven members to be appointed by the President subject to confirmation by the Council, and that the committee so appointed be charged with the direction of the Society's postgraduate educational program and its Bureau of Clinical Information, except as might be otherwise ordered by the Council. This motion was seconded, and it was so ordered by vote of the Council.

Dr. Root moved that the Council authorize the creation of a special committee to be known as the Committee on Medical Economics, that this committee consist of five members to be appointed by the President subject to confirmation by the Council, and that the committee so appointed be charged with the study and direction of methods by which members of the Society might be informed regarding the economic status of medical practice now and in the future. This motion was seconded, and it was so ordered by vote of the Council.

Dr. Root moved that the Council authorize the creation of a special committee to be known as the Committee on Veterans Affairs and that the members of this committee be appointed by the President subject to confirmation by the Council. This motion was seconded, and it was so ordered by vote of the Council.

Dr. Root moved that the Council authorize the creation of a special committee of five members to be appointed by the President, subject to confirmation by the Council, to consider the advisability of setting up a board of trustees within the structure of the Massachusetts Medical Society and that in the event that such a committee decides affirmatively in this matter it be further charged with recommending the duties of such a board of trustees and with the preparations of such amendment or amendments to the by-laws as might be necessary.

The President said that the Executive Committee had concerned itself with this recommendation. He asked the Acting Secretary to read that part of that committee's report which dealt with this subject. The latter read as follows:

> The Executive Committee recommends that the Council disapprove this recommendation. In the discussion attending this subject, it came out that the Executive Committee, consisting of one representative from each district in the Commonwealth, had been performing what might be regarded as the functions of a board of trustees, but that there was a feeling in the Committee on Postwar Planning that there was at times a lack of over-all policy due to the size of the Executive Committee and the shortness of time (three years) in which any single member might hold continuous office. On the other hand, it was emphasized in this discussion that there never had been any difficulty in getting the Executive Committee together even in emergency session and that a board of trustees might result in too centralized a government, which might affect unfavorably the democratic character of the Society and alienate the interests of the ordinary member. The wisdom of setting up a board of trustees, which in the ordinary course of events might be expected to take over the functions now being satisfactorily performed by the Executive Committee, was seriously questioned. It was pointed out that the recommendations did not actually propose that such a board of trustees be set up, but only that a committee be authorized to study this subject. It was also pointed out that a board of trustees might be needed to give direction to the efforts of the Director of Medical Information and Education. There were certain district societies that reported their councilors as unanimously opposed to the proposal.

The Acting Secretary moved the adoption of the recommendations of the Executive Committee. This motion was seconded.

Dr. Bagnall was recognized. He said that he spoke as an ex-president. He expressed the thought that only the individual who has served as president quite comprehends the whole prospective of the structure of the Society. He said that there was need for a group in the Society to whom the President could look for advice with regard to policies. He said that his experience as president led him to believe that the Executive Committee did not fill this function. Theoretically, he said, the setup of the Executive Committee was excellent. He said that it had not worked out because of the lack of interest which many of the members of the committee took in its proceedings. He said that he did not necessarily favor a board of trustees with any great powers; what he did want was a policy committee with a continuity of interests and made up of faithful, self-sacrificing men with the service motive to whom the President could turn for advice. He pointed out that the recommendation of the Committee on Postwar Planning simply asked for a committee to study this matter. Dr. Leroy E. Parkins, Suffolk, seconded Dr. Bagnall's remarks.

Dr. George L. Schadt, Hampden, said that a board of trustees would make the necessity for an executive committee practically nil. He said that presumably such a board might be made up of five or seven members. He added that he did not like to see such power placed in a small group. He thought that the answer to this whole difficulty might be had by reducing the size of the Council so that each member would represent one hundred members rather than twenty, as now prevails.

Dr. Carl Bearse, Norfolk, stated that he thought that the Society had done very well over the years without a board of trustees. He added that as the Society is set up today it is truly democratic. He

expressed the opinion that by setting up a board of trustees the Society would have a small group that would more or less run the organization. Dr. Bearse went on to say that the Executive Committee was set up five years ago when the present by-laws were adopted. He added that even then the danger of such a group dominating the Society was thought of and that to prevent such a situation it was provided that no member of the Executive Committee could serve consecutively more than three years.

Dr. Edward P. Bagg, Hampden, said that the only question before the Council was the creation of a committee to study this matter. He added that he believed that this recommendation of the Committee on Postwar Planning should prevail.

Dr. Frank R. Ober said that he had served as the first chairman of the Executive Committee and that in the beginning this committee was not particularly effective but that this was due to the fact that the duties of the committee had not been defined. He said, however, that as time went on the value of the committee had been proved. Its activities had shortened the Council meetings, and at no time had the Council been a rubber stamp for it. By the same token he believed that the Council would not be a rubber stamp for a board of trustees were such a group set up in the Society. He also pointed out that the recommendation of the Committee on Postwar Planning merely called for a study of this subject.

Dr. Root said that his committee, when it made this recommendation, did not have in mind the reducing or minimizing the function of any other committee now in existence. The purpose of the recommendation was simply to find some improved mechanism of meeting the new and varied problems that were continually presenting themselves.

The President said that the question came on the adoption of the recommendation of the Executive Committee and further defined the subject before the Council and asked it to vote on whether or not a special committee should be created to consider the advisability of setting up a board of trustees within the structure of the Massachusetts Medical Society. The Council voted not to establish such a committee.

Dr. Root then moved that the Committee on Postwar Planning be discharged. This motion was seconded.

The President said that the Executive Committee in favoring the adoption of this motion also recommended that the discharge carry with it the expression of the Council's gratitude for a job well done and that this expression of gratitude be in a special manner directed toward the chairman, Dr. Root, who had given so generously of his time and patience over a period of years. This motion was adopted by vote of the Council. The Council extended a rising vote of thanks to Dr. Root and his committee.

Committee to Nominate a Director of Medical Information and Education

(Dr. John F. Conlin asked to be excused while this part of the agenda was under consideration. The President granted his request.)

This report (Appendix No. 8) was presented to the Council by the secretary of the committee, Dr. Elmer S. Bagnall. The President said that it contained several recommendations: first, that Dr. John Francis Conlin be appointed Director of Medical Information and Education; second, that Dr. Conlin's employment begin on July 1, 1947; third, that his compensation be at a rate of $7500 per year, plus ordinary traveling expenses and appropriate vacation periods; that if his services are satisfactory and if he is satisfied with the work as it develops, he shall receive an increase of $500 on January 1, 1948, and on each January 1 until his maximum salary of $10,000 will be reached on January 1, 1952; and fourth, that legal counsel should be asked to draw up a written agreement which should embody these general terms, an understanding concerning the mutual termination of the agreement and provisions which will permit adjustments in salary should our national economy become subject to gross inflation.

All these recommendations of the committee were adopted without debate and by the unanimous vote of the Council.

Dr. Carl Bearse was recognized. He commented on the fact that the Council had just created a position without any statement regarding the duties of this position. He moved that the Director of Medical Information and Education be assigned to the Office of the Secretary. Dr. Donald Munro raised as a point of order that this motion constituted new business and was therefore out of order. The President declared the point of order well taken.

(At this point, Dr. John F. Conlin, having returned to the meeting, was asked to stand. He was greeted with applause.)

Dr. Ober moved that the committee report as a whole be accepted and that the committee be discharged with the thanks of the Council. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Postgraduate Assembly

This report, which is as follows, was presented by the chairman, Dr. Leroy E. Parkins, Suffolk:

> The committee invited the other New England state medical societies to co-operate in presenting the New England Postgraduate Assembly; each society responded and appointed members to the Executive Committee. A Program Committee and other committees were appointed, and the Assembly was presented at the Hotel Bradford on October 30 and 31, 1946.
>
> The attendance was as follows:
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> | | |
> |---|---|
> | Maine | 40 |
> | New Hampshire | 30 |
> | Vermont | 16 |

Massachusetts	359
Rhode Island	21
Connecticut	22
	488

The income and expenses were as follows:

Receipts from exhibits	$3,600.00
Receipts from registrations and tickets	3,202.45
Total	$6,802.45
Expenses	5,964.97
Credit balance	$837.48

This credit balance will offset deficits made in previous years. It also demonstrates that the Assembly can be self-supporting.

The Assembly Executive Committee recommends that the New England Postgraduate Assembly be continued as a permanent independent organization sponsored and supported by the New England state medical societies. It was suggested that a governing board be composed of officially appointed representatives from all the medical societies, each being allowed one representative for each one thousand members or fraction thereof (this is essentially the ratio of the current organization). Financial support, if necessary, would likewise be on a percentage basis.

The committee recommends that a committee be appointed to arrange an assembly in 1947 and that the Council approve of the setting up of an independent organization to be known as the New England Postgraduate Assembly.

Dr. Parkins moved the acceptance of the report. The motion was seconded and it was so ordered by vote of the Council. Dr. Parkins said that the report contained two recommendations, first, that a committee be appointed to arrange a postgraduate assembly in 1947. He moved the adoption of the first recommendation. This motion was seconded, and it was so ordered by vote of the Council. He said that the second recommendation requested the Council to approve the setting up of an independent organization to be known as the New England Postgraduate Assembly. He moved the adoption of this recommendation. This motion was seconded by a councilor.

The President said that the Executive Committee considered this and that inasmuch as the Council of the New England State Medical Societies was a going concern in which the Society was represented it thought that if the sponsorship of the postgraduate assembly was to pass from the Massachusetts Medical Society to New England it was desirable that it be assumed by this council as the only organization that is truly representative of New England as a whole. The President stated that at the time of the meeting of the Executive Committee, inasmuch as this subject had not been presented to the Council of the New England State Medical Societies, its viewpoint had not been ascertained. He added that it came to the committee's attention that this council was to meet on January 15. The Secretary, who is one of the representatives of the Society in this council, was instructed to ascertain its views in this matter. The President added that the Secretary had followed the instructions and that the viewpoint of the New England Council in this matter was fully outlined in the report of the Executive Committee. He said that this report indicated that the New England Council would have to ascertain the view of the several individual state societies which it represents before it could express an opinion with regard to the proposition. The report indicated that this could not be done much before June 1 and that this would be too late to allow for the planning of an assembly in the fall of 1947. The President said that as a result of this the Secretary suggested that the Council approve the first recommendation, which it had already done, so as to provide for the continuation of the assembly, and lay the second on the table until such time as the Council of the New England State Medical Societies was ready to act.

Dr. Frank R. Ober moved that the second recommendation be laid on the table. The motion was seconded by Dr. Walter G. Phippen, Essex South. It was so ordered by vote of the Council.

Committee to Study Increase in Assessment of Dues

This report (Appendix No. 9) was offered by the chairman, Dr. Frank R. Ober, Suffolk, who moved its acceptance. This motion was seconded, and it was so ordered by vote of the Council.

Dr. Ober said that in connection with an increase in dues the committee had considered certain functions of the Society which it ought to be, but was not, serving. He said that there was the matter of a retirement fund spoken of earlier in the meeting, as well as the care of widows and orphans of physicians who might find themselves in difficult circumstances. He said that the Vermont State Medical Society sets aside part of its annual dues for this purpose. Dr. Ober spoke of the Massachusetts Benevolent Society and the aid that it was giving to many. He said that thought should be given to the matter of combining in some way the efforts of this organization with those of the Massachusetts Medical Society. He said that the Boston Medical Library should be helped. He finally said that, although his committee offered no definite recommendations at this time, it was hoped that the Council would be thinking about the matter contained in the report. He said that the Executive Committee in its analysis of the report offered certain recommendations with regard to the matter of dues. He asked that these recommendations be read.

At the direction of the President, the Acting Secretary read from the report of the Executive Committee as follows:

With all these considerations in mind [referring to the Executive Committee's analysis of the report] the Executive Committee believes the membership dues should be increased. It also believes that out of this increase a certain allotment should be made to the Boston Medical Library. It therefore recommends:

First, that the Council set the membership dues at $25.00 per year;

Second, that this rate become effective January 1, 1948; and

Third, that of the total dues, $5.00 be earmarked for the use of the Boston Medical Library.

Dr. George L. Schadt, Hampden, moved the adoption of the first recommendation. This motion was seconded.

Dr. William H. Blanchard, Suffolk, thought that by raising the dues the Society might lose certain of its members. In consequence of that he said that there was some question in his mind whether or not the raising of the dues would really provide the funds necessary to do the things set forth in the committee's report.

Dr. Schadt said that in increasing the dues the individual member should think of this increase as enabling the Society to better serve the public rather than in terms of what additional benefits should accrue to him. He added that he was for the increase and that even if it were greater he would still support it.

Dr. Hyman Morrison, Norfolk, asked if the committee had considered the point of view of the young man who had just graduated and of the man in declining years whose income is waning. The President replied that there was no mention of such in the report.

The first recommendation of the Executive Committee was adopted by vote of the Council.

The President said that the second recommendation of the Executive Committee, namely, that the new rate of dues become effective on January 1, 1948, was before the Council. Its adoption was moved and seconded. The motion was adopted by vote of the Council. The adoption of the third recommendation of the Executive Committee was moved and seconded.

Dr. Phippen was recognized and spoke as follows:

I ask your indulgence to say a few words about the Boston Medical Library. It is an old institution, founded in 1805. It had many vicissitudes, and in 1872 the Massachusetts Medical Society, having a library of its own, suddenly decided that it did not need it and transferred its collection of books to the Boston Public Library.

This created one of our customary furores in the Society, and a lot of younger men started the Boston Medical Library, which began in Hamilton Place in 1875 and which has grown to this large establishment that we have today. It is now the third largest medical library in the country. It has nearly 200,000 books — probably over that now — and 135,000 pamphlets. It has a large collection of rare books.

The Boston Medical Library should fill a definite place in the profession of medicine, not only in Boston and in Massachusetts but also in all the New England states. It is one of the most important parts of the practice or of the profession of medicine.

I have often heard it said that those of you in the distant parts of the Commonwealth do not use the Library. That is not a fact. Every time you read one of the papers that are published in the *New England Journal of Medicine*, which have made the *Journal* what it is today, you are using the Library. All the bibliography for those papers comes out of this library. So every one of you use it.

A medical library occupies the same relation to the profession of medicine that a public library occupies to the citizens of a community. A lot of citizens in the community do not use the public library, and yet they pay for it and they pay for it gladly, because they know it has to do with their educational development. The same thing is true of the Boston Medical Library. You ought to be glad and willing to help support the Library because of the good it does to the profession at large.

A survey of the Library made by Dr. Fleming, of the Medical Library of Columbia University, in 1941 developed the fact that this library should be a real reference library, co-ordinating its activities with the libraries of the medical schools and with the libraries of the hospitals. And a committee that was formed to review that report so recommended. The trustees of the Library have tried hard to bring that about, but unfortunately it could not be done because of lack of funds. The Library depends for its income on certain gifts and bequests and on the income from its members. Many well intentioned people have given money to the Boston Medical Library, but unfortunately, a great deal of that money is earmarked for rare and unusual books. Therefore that money cannot be used for the running expenses of the Library. Every effort has been made by the Board of Trustees, particularly by Dr. Cheever, to interest philanthropic organizations in the Library. Foundations have been approached to see if they would contribute funds, but they are not interested in an organization that is not a going concern.

The trouble with the Library is that it has outgrown its income. It has gone on successfully and wonderfully, really, with the amount of help that it has had, to give the service that it has given, but it does not by any means begin to give the service that it ought to give. When you come to think that here is a library worth a great deal of money, with 200,000 odd volumes of books, that is serviced by a director, a secretary and four employees only, you can understand why it cannot give service.

This library could give a tremendous amount more service than it gives at the present time if it had the proper income. The income of the Library today is only about $30,000, and at that the yearly deficit is about $1000 or a little more. With the income that the Massachusetts Medical Society could give us, we would be able to service the Library. We would be able to provide enough personnel to put the multitudes of books that line the corridors, the cellars, the attic and the garret on the shelves where they belong, and to provide sufficient help so that you could use these books when you wanted them.

The Library is educational. I want to call your attention to this painting [pointing to the picture behind the President's desk] by an anonymous donor, which has been redone and which was exhibited at the Ether Day Celebration of the Massachusetts General Hospital; it caused a great deal of interest to everybody. It is one of the educational features of the Library.

I shall be only too glad to answer questions as to the needs of the Library, but I can say frankly that, unless something is done to help the Library, it will go on functioning in this modest way — for how long I cannot tell. You are economists enough to know that if it spends $1000 a year more than it earns, with an annual income of only $30,000 a year, it will not be long before the Library will have to close its doors.

All I can say is what Dr. Warren said on this occasion [again pointing to the picture], "Gentlemen, this is no humbug."

Dr. Schadt asked the previous speakers that in the event that the recommendation before the Council were adopted whether the Library would devise some method by which physicians in the western and northern parts of Massachusetts would be sent such books as they may require. Dr. Phippen answered in the affirmative.

Dr. Bearse asked whether it would still be necessary for the Library to have its own membership and dues if the motion prevailed. Dr. Phippen answered the question as follows:

Yes, it will be. Some of you may remember that a number of years ago an attempt was made to form an

academy of medicine, a combined membership of the Library and the Massachusetts Medical Society, and at that time it was found to be absolutely impracticable from a legal point of view.

The corporate body of the Library must remain in its fellowship, and its board of trustees. To change that or to change the name of the Library would create an insurmountable legal controversy. I have been into that with legal counsel, and the trouble is that many of these bequests are left for specific purposes and that to change the name of the Library, everyone, not only the families of the donors but those who might be interested in the ultimate distribution of the property, would have something to say. Such a legal tangle would be insurmountable. The membership of the Library must remain the same so far as the corporate interest is concerned.

Dr. Norman A. Welch, Norfolk, asked if the legality of the recommendation had been inquired into. Dr. Phippen read as follows from a letter that he had received from Mr. Robert Dodge, counsel for the Library and also for the Massachusetts Medical Society:

I think that the Massachusetts Medical Society may lawfully agree to contribute $25,000 a year toward the support and maintenance of the Boston Medical Library. Such an expenditure would seem plainly to be in the interests of the preservation of health, and therefore come within the chartered purposes of the Society.

Dr. Ober pointed out there might come a time when the Library might not need the funds that the adoption of this recommendation would provide and that under such circumstances the action proposed by the recommendation could be modified or rescinded entirely.

Dr. Nicholas Scarcello, Worcester, asked if it would be proper to amend the recommendation of the Executive Committee so as to provide that this grant to the Library of $5.00 from each $25.00 carry with it a request that the Boston Medical Library make the members of the Massachusetts Medical Society associate members of the Library. Dr. Phippen said that although he could not speak with authority on the subject, he thought that something like this could be done. The President said that he would entertain Dr. Scarcello's amendment.

Dr. Hyman Morrison thought that such an arrangement would tend to lessen the income that now accrues to the Library from dues.

Dr. Fremont-Smith, in seconding Dr. Scarcello's amendment, said that unless some arrangement of this kind could be made the Council would be criticized by the men in the outlying districts. He added that he rather favored the idea of making this grant to the Library contingent on the Library entering into some such agreement.

The President said that he doubted that the Library would ignore the request contained in the amendment. He announced that the question before the Council was the adoption of the third recommendation of the Executive Committee as amended by Dr. Scarcello. It was so ordered by vote of the Council. Dr. Ober moved the adoption of the report as a whole as amended. This motion was seconded, and it was so ordered by vote of the Council.

Report on the December, 1946, Meeting of the House of Delegates of the American Medical Association

The report (Appendix No. 10) was presented by Dr. David D. Scannell, Norfolk. The President, in commenting on its excellence, said that it was informational only. The acceptance of the report was regularly moved aud seconded. It was adopted by vote of the Council.

Committee to Survey Malpractice Insurance

This report, which is as follows, was submitted by the chairman, Dr. Carl Bearse, Norfolk:

A meeting of the committee was held on October 2, 1946. It was voted that letters be sent to the following: insurance companies underwriting most of the medical malpractice insurance in Massachusetts; secretaries of all state medical societies in the United States; and all members of the Massachusetts Medical Society, together with a questionnaire to be completed.

The letter to the insurance companies inquired as to the number of physicians insured by them in Massachusetts, the number of Massachusetts Medical Society members insured, whether they accepted graduates of unapproved medical schools, the amount of money paid out in settlement of claims during the previous ten years, the largest sum paid in the settlement of a single claim, their coverage and rates, and whether they would co-operate with a committee of the Massachusetts Medical Society by informing them of all suits or threats of suits brought against members of the Society insured by them for the interchange of opinion, provided of course that the physician insured agreed to this.

The letter sent to the secretaries of all state medical societies informed them that the Massachusetts Medical Society was making a survey of malpractice insurance in this state and that the Society would like to know how other state societies concerned themselves with this problem. The specific inquiries addressed to them were as follows: Does your society defend its members against suits of malpractice? Does your society pay any indemnity? Do you have a committee to serve as a clearing house for all suits for malpractice? What rates are charged by insurance companies in your state?

The letter and questionnaire sent to all members of the Massachusetts Medical Society are not being repeated here since they have already been mailed to every fellow. Replies are still coming in and are being tabulated for study.

This report is purely informational and is submitted as one of progress.

Dr. Bearse moved the acceptance of the report. This motion was seconded, and it was so ordered by vote of the Council.

Committee on Physical Medicine

This report, which is as follows, was presented by the chairman, Dr. Arthur Watkins, Middlesex South:

No new business has been brought before this committee, but the following informational report is submitted. In view of the several substandard schools for training physical therapists in this area, it is thought worth while to inform members of the Massachusetts Medical Society that there is available a printed directory of graduates of physical therapy schools approved by the American Medical Association who are members of the Massachusetts Physiotherapy Association. Physicians will be protecting their own and their patients' interests when prescribing physical therapy if technicians carrying out the orders have had training with the high medical standards required of this group. These directories can be obtained from Mrs. Dorothy V. Warren, Physical Therapy Department, Massachusetts General Hospital, Boston 14.

Dr. Watkins moved its acceptance. This motion was seconded, and it was so ordered by vote of the Council.

Committee to Study Income Level for Blue Shield

This report, which is as follows, was presented by the chairman, Dr. Charles F. Wilinsky, Suffolk:

> The committee has met to study the income level for Blue Shield subscribers in relation to eligibility for the Ward Plan.
>
> It has considered this question carefully and has given justifiable and serious thought to the relation of income level for medical eligibility under the Blue Shield Plan as related to similar eligibility to Blue Cross Ward Plan Service.
>
> The Blue Cross has recently given consideration to a change in income limitations for eligibility for its Ward Plan and has approved the following levels:
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> | | |
> |---|---|
> | Single subscriber, no dependents ..... | $2,000 |
> | Subscriber and one dependent ..... | 2,500 |
> | Subscriber with more than one dependent ... | 3,000 |
>
> A canvass of our committee has resulted in accord and approval of the above-mentioned earning limits in relation to Blue Shield eligibility, and we so recommend the above schedule for the consideration of the Council.

The President said that the Executive Committee was much confused by this report and recommended that it be referred back to the committee for elucidation. He called on Dr. Wilinsky to clarify it.

Dr. Wilinsky said that this matter had been referred to his committee for the purpose of determining whether or not, in view of the higher cost of living, the worker earning $2000 a year or the family whose total income was $2500 was in as good a position to pay a supplementary fee to the surgeon as he was when the Blue Shield was established. He said his committee believed that they were not. Consequently, it recommended the following new schedule: that no supplementary fee should be paid to the surgeon by the person earning $2000 or less, by the person with one dependent earning $2500 or less, or by the person with more than one dependent earning $3000 or less. Dr. Wilinsky moved the adoption of the recommendation of his committee. This motion was seconded, and it was so ordered by vote of the Council.

Committee to Meet with General Hawley

In the absence of Dr. McCarthy, the report was presented by the President. This report is as follows:

> Your committee has been to Washington, has completed Part A of the Fee Schedule and has turned it over to the Massachusetts Medical Service, Blue Shield, to administer.

The President, by way of implementing this report, said that the contract between the Veterans Administration and the Blue Shield had been signed. He added that the contract was in accordance with all the votes of the Council as to fees. It was moved and seconded that the report be accepted. It was so ordered by vote of the Council.

Medical Advisory Committee to the Regional OPA

This report, which is as follows, was presented by the chairman, Dr. Joseph Garland, Suffolk:

> The Medical Advisory Committee to the OPA has nothing more to do now than to review an occasional sugar application. When sugar goes off rationing, the committee can be retired, and we will be glad of the chance.

It was moved and seconded that the report be accepted. It was so ordered by vote of the Council.

Committee on Industrial Health

This report, which is as follows, was offered by the chairman, Dr. Daniel L. Lynch, Norfolk, as a report of progress:

> At the present time the Committee on Industrial Health can submit only a report of progress as follows.
>
> First, a survey is in progress to ascertain the names and connections of the physicians in Massachusetts who are actually engaged in industrial medicine, that is, physicians who have a definite connection with an industrial, mercantile or other establishment.
>
> Second, we are taking steps to determine the number and connections of nurses who are employed in industrial, mercantile, business or similar establishments.
>
> Third, we are taking steps to determine the number of nurses who have medical supervision and those who do not.
>
> It is our hope that this survey will be well along by the February meeting.

He moved its adoption as such. The motion was seconded, and it was so ordered by vote of the Council.

Appointments

The President made the following *ad interim* appointments:

To the Committee on Legislation:
Dr. Solomon L. Skvirsky, Norfolk.

To the Committee on Cancer:
Dr. Shields Warren, Suffolk, *Chairman*.

To the Committee on Veterans Affairs:
Dr. Edwin M. Mahoney, Hampden.
Dr. Charles A. Wheeler, Worcester North.

It was moved and seconded that these appointments be confirmed. It was so ordered by vote of the Council.

New Business

Dr. Augustus Thorndike, Suffolk, was recognized. He submitted the following resolution:

> Whereas, The Fracture Committee of the American College of Surgeons has recommended the establishment of community rehabilitation centers in all states, and
>
> Whereas, The National Service Fund of the Disabled American Veterans is sponsoring the establishment of a nonprofit organization in Boston to be called the Rehabilitation Center, on an outpatient service basis for patients in the terminal stages of convalescence, to which may be referred by doctors, by hospitals and by governmental and private agencies veteran and civilian patients with disabilities requiring medical evaluation and treatment, including physical therapy and occupational therapy, as well as evaluation for proper job placement at time of release; be it therefore
>
> Resolved, That the Council authorize the president to refer to the appropriate committee or committees for study, with a report and a recommendation to be presented at the next meeting of the Council, the question whether there

is need for such a community rehabilitation center and service in Boston, organized in accordance with the *Report of the Baruch Committee on Physical Medicine.*

The President referred this resolution jointly to the Committee on Rehabilitation and the Committee on Industrial Health.

At this point in the meeting, Dr. Daniel B. Reardon, Norfolk South, said that because he was late in entering the meeting he did not know whether or not any action had been taken by the Council regarding Dr. Tighe's illness. The President replied that in opening the meeting he had acquainted the Council with the fact that Dr. Tighe was ill. He added that he talked with him over the telephone that morning, that the latter's spirits seemed good and that he expected to be around again shortly. The President said that a box had been placed in the hall outside the Council room for the benefit of all those who wished to participate in sending the secretary a modest and appropriate remembrance.

The President announced that there was no further business before the Council. It was moved and seconded by vote that the Council adjourn.

The president announced the Council adjourned at 1:20 p.m.

MICHAEL A. TIGHE, *Secretary*

APPENDIX NO. 1

ATTENDANCE OF THE COUNCILORS

BARNSTABLE
P. P. Henson
C. H. Keene

BERKSHIRE
I. S. F. Dodd
C. F. Kernan
H. M. Scoville
P. J. Sullivan

BRISTOL NORTH
W. H. Allen
M. E. Johnson
C. B. Kingsbury
W. J. Morse
J. L. Murphy
W. M. Stobbs

BRISTOL SOUTH
R. B. Butler
J. C. Corrigan
C. C. Tripp

ESSEX NORTH
E. S. Bagnall
R. V. Baketel
G. J. Connor
N. F. DeCesare
H. A. Fenton
H. R. Kurth
P. J. Look
R. C. Norris
G. L. Richardson
F. W. Snow

ESSEX SOUTH
R. E. Foss
Loring Grimes
C. A. Herrick
P. P. Johnson
B. B. Mansfield
O. S. Pettingill
W. G. Phippen
J. R. Shaughnessey
H. D. Stebbins
P. E. Tivnan
C. F. Twomey
C. A. Worthen

FRANKLIN
F. A. Millett

HAMPDEN
E. P. Bagg
A. J. Douglas
E. C. Dubois
Frederic Hagler
G. D. Henderson
A. G. Rice
G. L. Schadt

HAMPSHIRE
H. A. Tadgell

MIDDLESEX EAST
Robert Dutton
W. H. Flanders
R. W. Layton
K. L. Maclachlan
M. J. Quinn
W. F. Regan
R. R. Stratton

MIDDLESEX NORTH
R. L. Drapeau
A. R. Gardner
W. F. Ryan
W. L. Twarog

MIDDLESEX SOUTH
E. W. Barron
J. M. Baty
J. D. Bennett
G. F. H. Bowers
Alice M. Broadhurst
Madelaine R. Brown
R. N. Brown
R. W. Buck
E. J. Butler
J. F. Casey
C. W. Clark
J. A. Daley
C. L. Derick
J. G. Downing
C. W. Finnerty
H. Q. Gallupe
V. A. Getting
H. G. Giddings
H. W. Godfrey
A. D. Guthrie
Eliot Hubbard, Jr.
F. R. Jouett
A. A. Levi
A. N. Makechnie
Dudley Merrill
C. E. Mongan
J. P. Nelligan
Dwight O'Hara
Fabyan Packard
L. G. Paul
L. S. Pilcher
Max Ritvo
M. J. Schlesinger
K. J. Tillotson
A. B. Toppan
J. E. Vance
C. F. Walcott
A. L. Watkins
Hovhannes Zovickian

NORFOLK
A. A. Abrams
C. E. Allard
B. E. Barton
Carl Bearse
Joseph H. Carey
J. H. Cauley
Susannah Friedman
D. L. Halbersleben
J. B. Hall
H. B. Harris
R. J. Heffernan
P. J. Jakmauh
C. J. E. Kickham
D. L. Lionberger
D. S. Luce
C. M. Lydon
D. L. Lynch
R. T. Monroe
F. J. Moran
Hyman Morrison
D. J. Mullane
J. J. O'Connell
W. R. Ohler
G. W. Papen
H. A. Rice
S. A. Robins
D. D. Scannell
S. L. Skvirsky
E. C. Smith
Kathleyne S. Snow

NORFOLK
A. R. Stagg
J. P. Treanor, Jr.
N. A. Welch
E. T. Wyman

NORFOLK SOUTH
D. L. Belding
Harry Braverman
Frederick Hinchliffe
E. K. Jenkins
N. R. Pillsbury
D. B. Reardon
H. A. Robinson
R. G. Vinal

PLYMOUTH
J. C. Angley
H. H. Hamilton
P. H. Leavitt
G. A. Moore
B. H. Peirce

SUFFOLK
H. L. Albright
A. W. Allen
W. H. Blanchard
W. J. Brickley
W. E. Browne
A. M. Butler
A. J. A. Campbell
David Cheever
J. F. Conlin
Pasquale Costanza
N. W. Faxon
Reginald Fitz
Maurice Fremont-Smith
Channing Frothingham
Joseph Garland
John Homans
L. M. Hurxthal
H. A. Kelly
T. H. Lanman
R. I. Lee
C. C. Lund
Donald Munro
R. N. Nye
F. R. Ober
F. W. O'Brien
J. P. O'Hare
L. E. Parkins
L. E. Phaneuf
Helen S. Pittman
W. H. Robey
H. F. Root
R. M. Smith
Augustus Thorndike
J. J. Todd
Conrad Wesselhoeft
C. F. Wilinsky

WORCESTER
C. R. Abbott
A. W. Atwood
George Ballantyne
I. J. Cohen
E. J. Crane
J. M. Fallon
L. M. Felton
R. H. Goodale
J. A. Lundy
D. K. McClusky
J. M. Olson
F. A. O'Toole
R. S. Perkins
E. L. Richmond
N. S. Scarcello
R. F. Sullivan
G. C. Tully
R. J. Ward
B. C. Wheeler

WORCESTER NORTH
H. C. Arey
J. J. Curley
C. B. Gay

APPENDIX NO. 2

Report of the Executive Committee of the Council

The Executive Committee of the Council met on January 8, 1947, in Sprague Hall, 8 Fenway, Boston, Mass., at 4:00 p.m. Dr. Dwight O'Hara, president of the Massachusetts Medical Society, presided. This was a regular pre-Council meeting called for the purpose of processing committee reports and for such other business as might legally come before it.

The record of the last meeting as submitted by the Secretary was approved.

Committee Reports

Report of the Meeting of the House of Delegates of the American Medical Association held in Chicago on December 7, 8 and 9, 1946

This report was submitted by Dr. David D. Scannell. The Executive Committee commends this report for the clarity with which it outlines the proceedings of the House of Delegates; it looks on it as informational only and recommends that the Council adopt it as such.

Committee on Arrangements

The Executive Committee notes that this report is informational only and recommends its adoption by the Council.

Committee on Publications

The Executive Committee notes that this report contains two recommendations.

The first request is that the Council authorize the publication of a directory of the officers and fellows of the Massachusetts Medical Society during the year 1947 and that the sum of $2000 be appropriated for this purpose. The Executive Committee notes that this appropriation is provided for in the budget. The Executive Committee recommends that the Council adopt this recommendation.

The second recommends that the advisability of adopting some sort of retirement plan for the full-time employees of the Society be referred to either an existing committee or a specially appointed committee to the end that if such committee thinks that action is advisable it be empowered to present such a retirement plan to the Council. The recommendation further provides that, in the event that a plan is recommended to the Council, it must first have the approval of the Committee on Finance. The committee's report explains that because of the scientific character of the Society its employees may not participate in the benefits of the present Social Security Act. The Executive Committee recommends that the Council adopt this recommendation and that this subject be referred by the President to the committee which has recently studied and reported on salary adjustments for the employees of the Society.

Committee on Public Relations

This report recommends that the Council authorize the Committee on Public Relations to establish a speakers' bureau. The Executive Committee concurs in this recommendation.

The discussion on this subject before the Executive Committee brought out several facts, all of which pointed to the wisdom and necessity of establishing such a bureau. The President and Secretary spoke of the many requests that they receive from time to time from lay organizations requesting speakers on medical and medicoeconomic subjects and of their inability to find those willing to accept such assignments. They both felt that in failing to do something about this in the past, the Society has neglected a valuable means of improving its public relations.

Reference was made to the fact that the American Medical Association had established a speakers' bureau as a means of making the people as a whole more aware of what organized medicine is offering in the interest of the public good. This national bureau will be in a position to train groups of doctors from the various states from the standpoint of adequately informing them not only on the subjects to be discussed but also on the methods of approach likeliest to succeed.

The Committee on Public Relations asks the privilege of organizing this movement in the Society. It would make its selection of speakers from all parts of the state. The Executive Committee also believes that by adopting this recommendation the Council would give at least some direction to the office of the Director of Medical Information and Education and that this office might, as one of its duties, work with and under the direction of the Committee on Public Relations in setting up and supervising the bureau called for in this recommendation.

Committee on Legislation

The Executive Committee regards this report as informational only and recommends its adoption as such.

Committee on Finance

This report presents the budget for the year beginning January 1, 1947. The Executive Committee recommends the adoption of the budget as presented by the Committee on Finance.

Report of the Committee on Society Headquarters

This report takes notice of the poor state of the Society's mechanical office equipment and of its inadequacy in meeting the demands put on it. The Executive Committee points out that the moneys necessary to carry out the recommendations contained in this report are incorporated in the budget as submitted. The Executive Committee recommends the adoption of the recommendations contained in this report.

Committee on Public Health

In reviewing this report the Executive Committee gave first consideration to that part of the report submitted by the Subcommittee on School Health. The discussion indicated that this subcommittee came into being as the result of a mandate of the Council which was motivated by a letter that Dr. Fitz received from a committee of school executives asking that the Massachusetts Medical Society set up a committee that would study ways and means of improving medical services in schools. The Executive Committee notes that the subcommittee's principal recommendation begins as follows: "To establish an effective liaison between representatives of the Massachusetts Medical Society and education officials at both state and local levels." The Executive Committee is in support of this proposal.

The Executive Committee notes that the subcommittee would activate this idea by (*a*) having the Massachusetts Medical Society appoint an over-all committee on school medical services, and (*b*) having each district society appoint a local committee on school medical services, it being understood that each district would apply this principle according to the needs of the individual district.

With regard to "*a*," the Executive Committee recommends that the word "over-all" be deleted and that the word "advisory" be substituted. The Executive Committee is impelled to this action because it believes that the latter word more clearly describes the function of such a committee and the limitations that should govern its activities.

With regard to "*b*," the Executive Committee, in carrying out the same idea, recommends that the word "advisory" be placed between the word "local" and the word "committee." The Executive Committee also recommends the deletion of the following language, "it being understood that each district will apply this principle according to the needs of the individual district." The Executive Committee is impelled to this action by reason of the fact that it regards these lines as redundant.

The Executive Committee notes that this report contains thirteen additional recommendations. Although it expresses its sympathy with what it conceives as the idea behind most of these recommendations, it recommends that they be referred to the advisory committee heretofore proposed by this report for further study and elucidation, when and if such a committee is set up. The Executive Committee is impelled to this action because of the magnitude of the recommendations and because certain practical questions are in need of answer before the Council should commit itself.

In referring these remaining recommendations to the proposed advisory committee, the Executive Committee suggests that the Council specifically direct the attention of such an advisory committee to recommendations 11 and 12, to the end that the language of these recommendations be changed so that the interpretation of physical findings

shall remain in the hands of the physician and not be shared with the school nurse.

The Executive Committee recommends that the Council approve the recommendation providing that the Council authorize the President to appoint a subcommittee of three to act as liaison between the Society and the Massachusetts State Department of Mental Health.

The Executive Committee approves the first part of the report dealing with Dr. Getting's program but notes that the last part concerns public-health personnel. If this were approved by the Council, it would commit the Society in a manner in which it should not be committed. It therefore recommends that the Council take no action on these lines on the ground that action on this subject is beyond the scope of the Society.

The remainder of the report of the Committee on Public Health is informational, and the Executive Committee recommends its adoption as such.

Committee on Postwar Planning

The Executive Committee notes that the first part of this report is informational. It recommends adoption of this part of the report.

The Executive Committee notes several recommendations. This Committee is in accord with all these recommendations except that which would authorize the creation of a special committee of five members to be appointed by the President, subject to confirmation by the Council, to consider the advisability of setting up a board of trustees within the structure of the Massachusetts Medical Society.

The Executive Committee recommends that the Council disapprove of this recommendation. In the discussion attending this subject, it came out that the Executive Committee, consisting of one representative from each district in the Commonwealth, had been performing what might be regarded as the functions of a board of trustees, but that there was a feeling in the Committee on Postwar Planning that there was at times a lack of over-all policy due to the size of the Executive Committee and the shortness of time (three years) in which any single member might hold continuous office. On the other hand, it was emphasized in this discussion that there never had been any difficulty in getting the Executive Committee together even in emergency session and that a board of trustees might result in too centralized a government, which might affect unfavorably the democratic character of the Society and alienate the interests of the ordinary member. The wisdom of setting up a board of trustees, which in the ordinary course of events might be expected to take over the functions now being satisfactorily performed by the Executive Committee, was seriously questioned. It was pointed out that the recommendations did not actually propose that such a board of trustees be set up, but only that a committee be authorized to study this subject. It was also pointed out that a board of trustees might be needed to give direction to the efforts of the Director of Medical Information and Education. There were district societies that reported their councilors as unanimously opposed to the proposal.

It was noted that the final recommendation by the Committee on Postwar Planning was that it be discharged. The Executive Committee in recommending that the Council adopt this recommendation also recommended that this discharge carry with it the expression of the Council's gratitude for a job well done and that this expression of gratitude be in a special manner directed toward the chairman, Dr. Root, who had given so generously of his time and talent over a period of years.

Committee Appointed to Nominate a Director of Medical Information and Education

The Executive Committee recommends the adoption of the recommendations contained in this report.

Committee on Postgraduate Assembly

The Executive Committee notes that this report contains two recommendations: that a committee be appointed to arrange an assembly in 1947 and that the Council approve of the setting up of an independent organization to be known as the New England Postgraduate Assembly.

The thinking in the Executive Committee with regard to the second recommendation was that if the postgraduate assemblies were to be operated by all the New England state medical societies, it was desirable that they be given sponsorship and direction by an organization that was already officially representative of these state societies. It was pointed out that the Council of the New England State Medical Societies was so representative and that at a meeting of the Council, which was scheduled for January 15, 1947, the taking over of this activity was to be considered by this council. It was explained that this council was made up of three representatives from each of the New England state medical societies and that it had its support from an equal assessment on each society and that that sum up to this time was one hundred dollars yearly. It was also pointed out that the manner in which the last assembly was operated demonstrated that this activity might be run at a profit.

The Executive Committee took no action on these two recommendations. The Secretary was instructed to ascertain the desires of the Council of the New England State Medical Societies in this matter and to make known in this report to the Council of the Massachusetts Medical Society what those desires were. The Secretary, as a representative of the Massachusetts Medical Society, was present at the meeting of the Council of the New England State Medical Societies, which was held in Boston on January 15, 1947. The following motion was adopted at that meeting:

> That the Council of the New England State Medical Societies postpone action for the present relative to sponsoring the New England Postgraduate Assembly until it can obtain the point of view of the individual state medical societies regarding their participation as co-sponsors.

It was pointed out that the action called for by this meeting could not be consummated by many of the state societies before June, 1947, and that even if it was favorable to the proposition, this would be too late to begin to plan for an assembly to be held in the fall of 1947.

It seemed to be the feeling generally that an assembly should be conducted in 1947 on much the same basis as it has been in the past and that before it was time to plan for the 1948 assembly, the Council of the New England State Medical Societies would know whether or not this was an activity which it would take over. (The Secretary would like to say that all this indicates that the Council might see fit to approve the first recommendation of the Committee on Postgraduate Assembly and lay the second one on the table. It must be emphasized that the above is a suggestion which comes from the Secretary alone, the Executive Committee as a whole having had no opportunity to review the information here recorded.)

Committee to Study an Increase in Assessment of Dues

This report reviews the present activities of the Society and such other activities as have from time to time been discussed as properly belonging in its sphere. The discussion concerns itself with the costs involved and concludes that the dues will have to be raised if the program outlined is to be realized. It notes that at one time an increase of $10.00 was discussed in the Executive Committee, which would make the dues $20.00. While noting the needs of the Boston Medical Library and the necessity of helping to meet those needs, the report makes no specific recommendation as to the amount that the Society should contribute. The report concludes as follows:

> After reviewing the suggestions for future plans for the Society, it may be necessary to raise the dues to $25.00. With such a program as outlined above, it will probably be necessary to make further study in order to present a comprehensive plan covering all contingencies for the present and the future. The dues should be raised sufficiently so that it will not be necessary to raise them again.

The following quotation from the report of the Committee on Finance was then read into the record:

> In the future, the salary of the Director of Medical Information and Education will add a sum to our annual budget which can hardly be expected to be covered by our present sources of income. The appointment of such a director will call for an increase in dues or for some other method of raising the amount of his salary and the expenses of his office.

As touching on the necessity of increasing the dues, the Treasurer, Dr. Eliot Hubbard, Jr., submitted the following:

For basic comparison the income for 1946 was as follows:

Annual dues	$51,522
Nonresident dues	1,776
General Fund	5,162
Phillips Fund	250
Censors' fees	1,185
Profit (Committee on Arrangements)	5,301
Profit (Postgraduate Assembly)	835
	$66,031

Income from the *Journal* is not included as it is not a constant sum, nor certain as a future source.

Taking the same income figure for 1947 and the budget estimate for 1947 of $64,195, there would only be a clearance of $1,836. This would not take care of the proposed salary of the Director of Medical Information and Education, to say nothing of other proposed and worthy expenditures. Therefore, some increase in dues is necessary.

In considering the increase in dues in the light of new and proposed expenses, it must be remembered that the increase applies only to annual dues, not to nonresident dues.

It has been advocated that the annual dues be increased to $25.00 and that $5.00 of this be allocated toward support of the Boston Medical Library. If this was done, the income and expense accounts would be as follows:

Income:	
Annual dues (5200 resident fellows)	$130,000
Other income	14,509
Total	$144,509
Expenses:	
Budget	$64,195
Boston Medical Library	26,000
Ultimate salary of Director of Medical Information and Education	10,000
Total	$100,195
Credit balance	$44,314

If the dues were increased to $20.00, the income and expense account would be as follows:

Income:	
Annual dues	$104,000
Other Income	14,509
Total	118,509
Estimated expenses	100,195
Credit balance	$18,314

This might seem adequate at the moment, but other projects are being proposed, namely, a retirement fund for the full-time personnel in the administrative office, a fund to aid and assist member physicians incapacitated through illness, injury or age, and like aid for needy widows and orphans of members. With these in mind, and the annual increase in administrative expense that has occurred regularly over many years, it might not be long before the dues would have to be increased to $25.00 from $20.00, if the latter figure were now agreed on.

If the annual dues be raised to $25.00, I should like to make the following suggestions:

That the refund to district societies be increased from $4,000 a year to $8,000.

That the total amount of the assets of the General Fund be set at some figure agreed on by the Committee on Finance, perhaps $250,000, and not be increased each year by reinvestment of surplus, as is up to now possible and customary for no specific purpose, and that in any given year, after running expenses have been paid and aid to the Boston Medical Library and other beneficiaries given, the balance of income over expenditures be automatically turned over to the Building Fund. This fund so augmented would assure the purchase of adequate headquarters at the proper time and would allow for a Building Fund endowment, the income from which would support the running of this establishment.

Dr. Walter G. Phippen, a member of the Executive Committee and president of the Boston Medical Library, made a statement as to the needs of the Library, which was in much the same vein as previously reported to the Council by the Executive Committee. He said that if the Library had an additional income of $25,000 to $30,000 yearly, it could become a very valuable instrument to all the physicians of the Commonwealth. He said he realized that the Library was not doing the job that it should. He explained this by saying that it did not have sufficient funds. He added that it was his feeling that the Library occupies a position toward the profession of medicine in Massachusetts exactly the same as that occupied by a public library toward the taxpayers of the community.

In response to a question, Dr. Phippen said that with additional funds available with which to sort and catalogue books, which were at present piled up in many places, more space, to the extent of two or more large rooms, might be made available for the use of the Society. The discussion also brought out the fact that if funds were made available to the Library, it could send books to any member of the Massachusetts Medical Society and therefore be of service to all.

With all these considerations in mind, the Executive Committee believes the membership dues should be increased. It also believes that, out of this increase, a certain allotment should be made to the Library. It therefore recommends:

That the Council set the membership dues at $25.00 per year.

That the rate become effective January 1, 1948.

That of this $25.00, $5.00 be earmarked for the use of the Boston Medical Library.

Committee Surveying Malpractice Insurance

The Executive Committee recommends that this report be accepted as one of information.

Committee on Physical Medicine

The Executive Committee recommends that this report be accepted as informational.

Committee to Study the Income Level for Blue Shield

The Executive Committee was much confused by this report. It recommends that the Council refer it back to the committee for elucidation.

Committee to Meet with General Hawley

This report is informational only, and the Executive Committee recommends its acceptance as such.

MICHAEL A. TIGHE, *Secretary*

APPENDIX NO. 3

REPORT OF THE COMMITTEE ON PUBLICATIONS

The *New England Journal of Medicine* has operated successfully so far this year. The outlook for next year is also bright. We hope that it will not be necessary to call upon the Society for any funds for the year 1947, but the situation is so uncertain, owing to the rise in price of materials, that we ask for an appropriation of $5,000 to be drawn on if necessary. The estimated revenue and expenses for the year 1947 are shown on the statement which has been submitted to the Treasurer and the Committee on Finance. This statement is included in the report of the Treasurer. A full report of the operation of the *Journal* will be submitted at the annual meeting of the Council in May.

It has been customary to publish a *Directory of Fellows* every two years. The last one was published in 1945. Therefore a new directory should be published in 1947. The committee believes that it is important to publish a directory in 1947 because there have been so many changes in the addresses of fellows since the publication of the last directory. We therefore request an appropriation of $2,000 for the publication of the Directory.

For the past year, the Committee on Publications has seriously considered the adoption of some sort of retirement plan for the full-time employees of the *Journal*. Since the employees of a non-profit educational organization are not entitled to the benefits of the Social Security Act, it seems

only reasonable that some provision should be made for retirement allowances, when these people reach a certain age. Indeed, many commercial companies have, in recent years, adopted retirement plans that supplement the Social Security benefits.

At the last meeting of the committee, held on December 4, it was suggested that, since the Society has an appreciable number of full-time employees, it likewise might consider a retirement plan, and that if such a plan were adopted, it would be well for the *Journal* to follow an identical plan.

The committee therefore makes the following recommendations to the Council:

That the advisability of adopting some sort of retirement plan for the full-time employees of the Society be referred to a committee of the Society, either an existing committee or a specially appointed committee according to the desires of the President; and that, if the adoption of such a scheme seems desirable, a specific retirement plan be presented to the Council, subject to approval by the Committee on Finance, if the matter was not referred to said committee.

Dr. William Dock, Director of Medicine, Long Island College of Medicine, Brooklyn, New York, has been secured to deliver the Shattuck Lecture in 1947.

APPENDIX NO. 4

Report of the Committee on Finance

The figures which make up the bulk of the report of the Committee on Finance are not to be regarded as a complete accounting of the finances of the Society. They represent a reasonably accurate estimate of expenditures based on the amounts paid out by the Treasurer during the first ten months of the current year plus an additional 20 per cent intended to cover the probable expenses for the remaining two months. This estimate, together with requests received from the various committee chairmen, serves as the basis of the budget which the by-laws of the Society require us to recommend to the Council for the proximate fiscal year. For purposes of comparison, similar items of expenditure for the current year are recorded, together with the estimates which made up the 1946 budget. We have appended similar estimates of income received by the Society during 1946.

A comparison of expenditures with income shows that we are operating well within our resources. Expenses were less than the amount anticipated in the 1946 budget, and income was greater; for example, income from dues amounted to approximately $52,000 instead of the expected $45,000. In the future, the salary of the Director of Information and Education will add a sum to our annual budget which can hardly be expected to be covered by our present sources of income. The appointment of such a director will call for an increase in dues or some other method of raising the amount of his salary and the expenses of his office.

Most of the items in the budget are self-explanatory. Unusually large items are explained in the footnotes. The amounts requested by the committee chairmen have in most instances been reduced to a slight degree. This reduction is based on the fact that items referring to clerical services were subtracted in accordance with the expressed offer of the secretary, Dr. Tighe, to provide facilities at the Society headquarters for the performance of all the clerical work of the various committees so far as possible. It is hoped that this will relieve the committee chairmen of much clerical work. The plan is intended to assist them, not of course to interfere with their present methods except in so far as it will work for greater convenience and efficiency. The budget for headquarters committee expense and general administrative expense reflects this plan, as supplies and all salaries for clerical assistants are included in these items.

Francis C. Hall
Fabyan Packard
Bancroft C. Wheeler
Charles F. Wilinsky
Robert W. Buck, *Chairman*

Detailed Expenditures — 1946

New England Postgraduate Assembly		
Printing		$533.84
Meals		157.60
Advertising		113.00
Clerical		37.24
Mailing		239.83
Supplies		108.30
Telephone		8.95
Postage		15.00
Cash for meeting		100.00
Refund tickets and a bouncing check		31.25
Speakers		4,619.96
Total expense		$5,964.97
Income		$6,802.45
Profit		837.48
Refunds to District Medical Societies		
Refunds		$4,000.00
Council of the New England State Medical Societies		
Contribution		100.00
Massachusetts Medical Clerical		
Miss Kelley since July 1		540.00
Miss Biggy since September 1		280.00
		$820.00
Estimate November-December		585.00
		$1,405.00
Salaries 1946		
Secretary		$3,500.00
Executive Secretary		4,400.00
Treasurer		2,250.00
Expenses of Officers and Committees		
President's Expense		
Newsclip		10.00
Clerical		75.04
Meals		9.61
Travel		45.00
		$139.65
Estimate November-December		30.35
		$170.00
Secretary's Expense		
Printing		$907.57
Clerical		1,522.98
Supplies		140.25
Reporting		208.50
Postage		251.78
Mailing		60.43
		$3,091.51
Estimate November-December		588.17
		$3,679.68
Treasurer's Expense		
Miscellaneous		
Premium on bond	$37.50	
Auditors	315.00	
Rent box	18.00	
	$370.50	370.50
Clerical		446.14
Loomis-Sayles		1,164.51
Printing		10.14
Postage		163.80
Estimate for November-December		$2,155.09
Billheads, stationery and clerical		245.46
		$2,400.55
Delegates to A. M. A. Expenses		
Expenses		2,252.97
Estimate for November-December (December m eting)		788.02
		$3,040.99
Shattuck Lecture		
Expense		200.00
Cutting Luncheons		
Expense		543.20
General Administrative Expense		
Travel		912.75
Clerical		145.32
Printing		911.79
Telephone		484.30
Meals		96.92
Supplies		311.74
Mailing		29.71
Postage		48.50
Premiums Blue Cross and Blue Shield		44.25
Miscellany (*Journal* account)		744.72
Newsclip		15.00
Funeral flowers		15.00
		$3,760.00
Estimate for November-December		487.90
		$4,247.90

Executive Committee		
Clerical		$92.90
Meals		153.34
		$246.24
Estimate November-December		39.35
		$285.59
Legislative Committee		
Printing		86.50
Postage		11.84
Clerical		67.75
Telegrams		140.98
Mailing		23.24
Reporting		146.48
Meals		221.84
Mr. Charles Dunn		3,075.00
		$3,773.63
Estimate for November-December		378.66
		$4,152.29
Public Relations Committee		
Printing		161.75
Travel		24.00
Meals		249.30
Clerical		106.89
		$541.94
Estimate for November-December		107.85
		$649.79
Committee on Arrangements		
Printing		$624.25
Envelopes		44.94
Clerical		193.39
Publicity		10.25
Meals		2.76
Annual Meeting		8,470.66
Rebate on booth and tickets		72.25
		$9,418.50
Estimate for November-December		101.72
		$9,520.22
Income		14,781.19
Estimated Profit		$5,260.97
Committee on Ethics and Discipline		
Meals		22.23
Clerical		115.78
		$138.01
Estimate for November-December		24.91
		$162.92
Finance Committee		
Estimate for November-December		$20.23
Committee on Medical Defense		
Palmer-Dodge		708.80
Estimate for November-December		189.89
		$898.69
Committee on Membership		
Clerical		71.18
Meals		52.39
		$123.57
Estimate for November-December		54.53
		$178.10
Society Headquarters Committee		
Supplies		309.55
Electricity		169.82
Cleaning		187.70
Rent		2,437.49
		$3,104.56
Estimate for November-December		959.89
		$4,064.45
Committee on Publications		
Clerical		3.12
Committee on Public Health		
Dues Massachusetts Central Health Council		10.00
Meals		35.25
Clerical		5.67
		$50.92
Estimate for November-December		13.12
		$64.04
Committee on Industrial Health		
Meals		79.93
Estimate for November-December		40.81
		$120.74
Committee on Tax-Supported Medical Care		
Clerical		2.08
Meals		20.45
		$22.53
Estimate for November-December		14.38
		$36.91
Committee to Meet with Massachusetts Hospital Association		
Clerical		5.66
Military Postgraduate Committee		
Clerical		0.52
Postwar Loan Fund		
3 per cent on 17 $500 loans		$255.00
Clerical		3.33
Legal		25.00
		$283.33
Estimate November-December		50.00
		$333.33
Postwar Planning Committee		
Postwar Planning		
Meals	$216.54	
Clerical	214.54	
	$431.08	431.08
Clinical Information Bureau		
Wages	1,676.47	
Printing	275.43	
Clerical	40.44	
Telephone	157.34	
Supplies	107.00	
Postage	281.70	
	$2,538.38	2,538.38
Postgraduate Medical Education		
Printing	$632.30	
Meals	281.39	
Supplies	131.06	
Mailing	20.00	
Sanders Theater	544.97	
Caterer	336.00	
Lecturers	1,291.93	
	$3,237.65	3,237.65
Medical Economics		
Printing	32.50	
Meals	41.40	
	$73.90	73.90
Veterans Affairs		
Printing	11.00	
Meals	50.10	
	$61.10	61.10
		$6,342.11
Estimate for November-December		593.00
		$6,935.11
Committee on Fee Schedule		
Meals		$ 44
Printing		199.92
		$208.36
Estimate for November-December		75.00
		$283.36
Committee to Study Malpractice Insurance		
Estimate for November-December		400.00
"Committee of 7"		
Meals		14.55

APPENDIX NO. 5

BUDGET FOR 1947

Expenditures 1946		*Budget 1947*
	Salaries	
$3,500.00	Secretary	$4,000
4,400.00	Executive Secretary	4,800
2,250.00	Treasurer	2,500
	Expenses of Officers, etc.	
170.00	President	300
0.00	President Elect	300
3,679.68	Secretary	1,500
2,400.55	Treasurer	2,000
3,040.99	Delegates to A. M. A.	1,500
200.00	Shattuck Lecture	200
543.20	Cotting Luncheons	600
4,247.90	General administrative expense (under supervision of President and Secretary)	10,250*
	Committees Elected by District Societies	
285.59	Executive	400
4,152.29	Legislative	5,000
649.79	Public Relations	600
	Standing Committees	
(profit)	Arrangements	200
162.92	Ethics and Discipline	50
20.23	Finance	25
898.69	Medical Defense	1,500
178.10	Membership	100
4,064.45	Society Headquarters	7,500†
3.12	Publications	7,000‡

*Include salaries of new clerical assistants (Miss Kelley, $1,872, Miss Biggy, $1,820, and Miss Cowles, $2,406).

†Includes cost of new Addressograph ($2,100), Multigraph ($550), four typewriters ($593) and supplies.

‡Includes $2,000 requested for publication of 1947 Directory.

Expenditures 1946		*Budget 1947*
64.04	Public Health	70
120.74	Industrial Health	100
	Special Committees	
36.91	Tax Supported Medical Care	30
5.66	Committee to Meet with Massachusetts Hospital Association	—
333.33	Postwar Loan Fund	335
0.52	Military Postgraduate Committee	—
6,935.11	Postwar Planning	
	Postgraduate Medical Education	3,750
	Bureau of Clinical Information	3,750
	Veterans Affairs	75
	Medical Economics	75
283.36	Fee Schedule	365
400.00	To Study Malpractice Insurance	200
14.55	Committee to Appoint Director	20
0.00	Council Rules	0
0.00	Expert Testimony	0
0.00	Maternal Welfare	0
0.00	To Meet with Industrial Accident Board	0
	Other Expenditures	
(profit)	New England Postgraduate Assembly	1,000
4,000.00	Refunds to District Medical Societies	4,000
100.00	Council, New England State Medical Societies	100
1,405.00	Massachusetts Medical Society — Clerical	0
$48,546.72		$64,195

ESTIMATED INCOME FOR 1946

Annual dues to November 1, 1946	$49,157
Nonresident dues to November 1, 1946	1,746
Estimated annual dues November-December	1,300
Estimated nonresident dues November-December	22
Estimated income from General Fund and Phillips Fund	5,271
Estimated income from Censors' Fees	963
Postgraduate Assembly (estimated profit)	837
Committee on Arrangements (estimated profit Annual Meeting)	5,329
	$64,625

APPENDIX NO. 6

REPORT OF THE COMMITTEE ON PUBLIC HEALTH

This report is divided into two main sections — the first section dealing with subjects submitted for further action by the Society; the second section containing informational material.

SECTION I

1. Report of Committee on School Medical Services

Last year a committee of school executives sent a letter to President Reginald Fitz asking the Massachusetts Medical Society for a committee to study ways and means of improving medical services in the schools. This was referred to the Committee on Public Health for action which authorized the appointment of a subcommittee for this purpose. The report of the subcommittee, which is appended, has the approval of the committee as of October 23, 1946, and is submitted for further action.

2. Mental Hygiene

A letter from Dr. W. W. Bauer of the American Medical Association concerning a resolution from the House of Delegates was referred by President O'Hara to this committee. It suggested that "each state medical society take the lead in the development of an adequate state-wide mental hygiene and mental disease program." Correspondence with Dr. Clifton Perkins, Commissioner of the Department of Mental Health, revealed the fact that he would welcome the appointment of a committee from the Massachusetts Medical Society to act as liaison between the Society and his department. The Committee on Public Health voted on October 23, 1946, to recommend that a subcommittee of three be appointed by the President to act as liaison for mental hygiene between the Society and the State Department of Mental Health. Approval of this action is requested.

3. Public-Health Personnel

Another letter from Dr. Bauer to the Society enclosing resolutions from the House of Delegates of the American Medical Association passed in 1942 was referred to this committee. It stated as follows: "that the trustees of the American Medical Association be urged to use all appropriate resources and influences of the Association to the end that . . . complete coverage of the nation's area and population by local, county, district or regional full-time modern health services be achieved." In discussion of this last proposition Dr. Vlado A. Getting, Health Commissioner, informed the committee of his problems in maintaining his personnel. He stated that he had a large number of vacancies on his staff which he could not fill partly because of the lack of properly trained people and partly because of the low salary level. It was voted that aggressive support of Dr. Getting's proposals be given and that the aid of the Committee on Legislation be obtained in expediting this program as follows:

To raise the salary level of the professional personnel engaged in public health on a state and local basis.

To institute a sanitary code.

To provide for subsidization of local health departments when, as and if they meet standards as to personnel and program content.

To promote town unions of adequate size (at least 20,000 population) to support a modern public-health and school-health program at a per capita cost of $1.50 to $2.50 exclusive of tuberculosis and communicable disease control and exclusive of garbage collection.

SECTION II

1. Dietary Manual

The State Department of Public Health is interested in publishing a pamphlet *A Guide for Planning Normal and Therapeutic Diets* for distribution to public-health and welfare workers to aid in the better interpretation of therapeutic diets prescribed by physicians. The Committee of Public Relations of the New York Academy of Medicine has approved similar material for use in New York State. Nurses, nutritionists and social workers have expressed a desire for something of this kind in Massachusetts in order to have a common understanding of these diets, and the type of meals the patient may be expected, or guided, to buy and eat, whether at home or in a restaurant. The committee which prepared the material represents the dietary departments of a group of leading Boston hospitals, and their opinions in regard to these diets are based on the practices approved by the medical departments in these hospitals. The committee concurred in the publication of this manual.

2. Influenza Vaccine

At the October 23 meeting the use of influenza vaccine was discussed. Dr. Wesselhoeft gave a comprehensive and practical summary of the use of influenza vaccine, its effectiveness and reactions to be expected. Committee discussion supported by the visitors resulted in the decision that the committee would take no action in its active promotion at the present time, but it did recommend continued study in its use by the State Department of Public Health, or any other qualified authorities.

3. Diabetic Survey

Also considered at this meeting was Dr. Wilkerson's diabetic survey in the town of Oxford, given in his absence by Dr. Ford, who stated, that of 880 postprandial urine and sugars at an average age of forty, 5.3 per cent known diabetics were picked up and 2.8 per cent new diabetics were discovered. Of the 1000 school children in Oxford, 750 have been studied; 15-25 per cent refusals have been encountered. Glucose tolerance tests are done on all persons whose blood sugars are greater than 160 mg. per 100 cc. The report of this survey was accepted with interest and much enthusiasm was expressed in its continuation.

REPORT OF THE SUBCOMMITTEE ON SCHOOL HEALTH

The committee recommends that:

1. To establish an effective liaison between representatives of the Massachusetts Medical Society and health and education officials at both state and local levels:

(a) The Massachusetts Medical Society appoint an overall committee on school medical services.

(b) Each district society appoint a local committee on school medical service — it being understood that each district will apply this principle according to the needs of the individual district.

2. The present law requiring annual examinations be amended to provide for less frequent, but more adequate examinations on a spaced and selective system at least four times during the child's normal school life; and that the law (Chapter 384) requiring examination of the feet be repealed as this is included in an adequate examination.

3. The Massachusetts Medical Society approve suggested legislation providing for full-time qualified medical health officers whenever possible and that school medical service be under their direction. The remuneration for full-time medical health officers should be sufficient to attract qualified personnel.

4. Examination by a private physician be acceptable to the school medical authorities if the examination is recorded on the school health form.

5. Teacher training be provided in teachers' colleges in growth and development of children; in teacher observation of the health of children; and in health education.

6. The Massachusetts Dental Society be encouraged to participate in the school health program to a greater extent.

7. Qualified district and community nutritionists provide for nutrition phases of local school health programs including school lunch programs.

8. There be provided a program of improved teacher health requiring health examinations and chest x-rays of teachers on employment and by periodic health examinations including chest x-rays.

9. There be provided adequate physical, mental and psychologic examinations of entering school children early enough so that there may be correction of remediable defects and completion of immunizations before the child enters school.

10. The presence of parents be urged at the examination of younger children so that parental understanding of health needs may be insured.

11. The interpretation be provided by the school physician and nurse of health findings to older children so that they may be motivated to do what is in their power to improve their health.

12. There be provided interpretation by the school physician and nurse of health findings to teachers so that they may understand the health status of children under their daily observation, may make suitable provisions in classrooms and may assist the school nurse in emphasizing conditions to parents.

13. There be co-operation with the physical education program.

14. Continuing staff education for health personnel be provided under suitable auspices.

APPENDIX NO. 7

Report of the Committee on Postwar Planning

After much consideration the committee concludes it should ask for its discharge on the ground that the occasion for its over-all activity has largely passed. The committee believes that certain of its activities should be continued and that for this purpose special committees should be established by the Council.

For the information of the Council, this committee, originally composed of twenty-five members, was appointed by President Bagnall in October, 1944, and its first meeting was held in November of that year. The committee recommended the appointment of various subcommittees because of its recognition of the varied nature of the needs to be met during the period just before and just after the end of the war. The following subcommittees were appointed: to study the need and provision for opportunities in hospitals for additional residencies in medicine, surgery and the specialties; to initiate courses in postgraduate medical education, partly for the doctors at home but chiefly for returning veterans; to co-operate with medical schools; to study medical economics and changing economic problems as they would affect the future of medical practice and particularly the returning veteran; to study organization of the Massachusetts Medical Society in relation to the postwar era; and to consider veterans' affairs.

All these subcommittees held meetings, and some action was taken in all these fields. Meetings of the subcommittee on hospitals with trustees, superintendents and chiefs-of-staff of hospitals in Massachusetts not already approved for residencies were held. Actually the number of hospital residencies approved by the Council on Medical Education and Hospitals of the American Medical Association increased materially during the last two years owing to the energetic interest of the hospitals and the co-operation of the Council.

The Subcommittee on Postgraduate Medical Education received a further duty by vote of the Council in being charged with the management of the Bureau of Clinical Information. The Bureau of Clinical Information has been extremely busy; and a report of its activities was made to the Council in February, 1946. A new arrangement of postgraduate courses based on geographic units led to a successful carrying out of the courses throughout the Commonwealth and of one course of six hours per week for twelve weeks at Sanders Theater, Cambridge, in the spring of 1946.

The Subcommittee on Medical Economics after nearly one hundred hours in session produced a set of basic principles which should govern medical care plans. These principles, after slight modification, were adopted by the Council and attained national distinction, notably at the hearings of the Senate Committee on Education and Labor in Washington, D. C.

The subcommittees on Veterans' Affairs, Organization and Medical Schools have made recommendations embodied in previous reports.

A proposal made jointly by the Committee on Postwar Planning, the Committee on Legislation and the Committee on Public Relations, providing for a permanent director of medical information and education was accepted by the Council.

The committee recommends:

That the Council authorize the creation of a special committee to be known as the Committee on Postgraduate Medical Education;

That the committee consist of seven members to be appointed by the President subject to confirmation by the Council; and

That the committee so appointed be charged with the direction of the Society's postgraduate educational program and its Bureau of Clinical Information, except as may be otherwise ordered by vote of the Council.

The committee recommends:

That the Council authorize the creation of a special committee to be known as the Committee on Medical Economics;

That the committee consist of five members to be appointed by the President subject to confirmation by the Council; and

That the committee so appointed be charged with the study and direction of methods by which the members of the Society may be informed regarding the economic status of medical practice now and in the future.

The committee recommends:

That the Council authorize the creation of a special committee to be known as the Committee on Veterans Affairs; and

That the members of this committee be appointed by the President, subject to confirmation by the Council.

The committee recommends:

That the Council authorize the creation of a special committee of five members to be appointed by the President, subject to confirmation by the Council, to consider the advisability of setting up a board of trustees within the structure of the Massachusetts Medical Society; and

That in the event that such a committee decides affirmatively in this matter it be further charged with recommending the duties of such a board of trustees and with the preparation of such amendment or amendments to the by-laws as may be necessary.

The committee recommends that it be now discharged.

APPENDIX NO. 8

Report of the Committee Appointed to Nominate a Director of Medical Information and Education

Because of elapsed time since the Council assigned this study to the committee, it seems desirable to review the whole situation.

The growth of the Society and expansion of activities have been such that it became increasingly apparent to several committees and individual fellows that the time had come to create a new position for the handling of public relations, legislation and other matters which would inevitably arise in future Society activities. Toward this end, a special committee, the Committee on Public Information, studied the situation last year, conferring with Society committees, public relations experts, health educators, newspaper and radio men and so forth and then, together with the Postwar Planning, Legislative and Public Relations committees, placed the matter before the Council. On October 3, 1945, the following resolution was adopted by the Council:

Whereas, We consider that the Massachusetts Medical Society is under obligation to make its educational facilities of increasing usefulness to fellows, to all licensed physicians in Massachusetts and to the public; therefore, be it

Resolved, That the Massachusetts Medical Society hereby creates a new position, its holder to be known as the Director of Medical Information and Education, charged with the duty of promoting in an ethical manner the educational usefulness of the Society to its fellows and to the public and also charged with the performance of such other duties as the Society or the Council may require, and be it further

Resolved, That such a Director of Medical Information and Education shall be appointed by the Council on proposal of a Committee of Seven named by the President.

The President appointed this committee as follows: Elmer S. Bagnall, David Cheever, Roger I. Lee, Charles E. Mongan, Frank R. Ober, Walter G. Phippen and George L. Schadt, with the President and President-Elect members *ex officiis*.

Since retiring from the presidency of the Society in May, 1946, Dr. Reginald Fitz has been a party to the committee's discussions, as has President-Elect Edward P. Bagg.

The first meeting of this committee was held on October 24, 1945. Dr. Fitz was appointed as the first chairman and Dr. Bagnall was elected secretary.

Since that time, numerous meetings have been held. The committee felt that the selection of the right man required a definition of his duties far more precise than is given in the vote of the Council, to the end that his qualifications and attainments should be adapted to those duties. Therefore, they first studied the broader aspects of this field. Letters were sent to all state societies. Replies were received from more than half, some of which sent voluminous evidence of activities. Many issues and problems were brought to light. Letters to Dr. Creighton Barker, who holds a similar position in the Connecticut State Medical Society, Dr. Olin West, secretary of the American Medical Association, Thomas A. Hendricks, secretary, and Dr. Joseph S. Lawrence, director of the Council on Medical Service and Public Relations of the American Medical Association brought forth advice and recommendations. The presidents of our district societies were contacted by letter for assistance in locating a man but only one or two suggestions were forthcoming.

In May, 1946, the committee made a report to the Council which said, in part:

> The committee feels that much of the work of the new director must at first be of an exploratory and tentative character and that its final emphasis and value cannot be predicted. Much will depend on the particular talents which he may bring to his office. They believe that ideally the incumbent should be a physician, a member of the Society, experienced in practice, and in early middle life, so that before him may stretch a long career of usefulness, which will steadily increase with his experience. Such a man must, of course, be on a full-time basis, and receive a salary sufficient to enable him to relinquish the income from a successful practice. His appointment should be terminated on his reaching a prescribed age, as in the case of academic or teaching appointments.

The committee has failed thus far to discover a suitable candidate with all these qualifications. They agree that the selection of the candidate is a matter of paramount importance and have preferred to proceed with caution rather than run the risk through haste of committing a grave error. This report, therefore, is one of progress and contains no recommendation.

Although several men had been suggested as possibilities for the position of Director of Medical Information and Education, none were considered by the committee as having the proper qualifications until the name of Dr. John F. Conlin was brought to the attention of the committee by letters from Dr. Elliott Cutler, Dr. John Fallon and Dr. Sidney Farber.

Investigation brought out these essential facts about Dr. Conlin:

John Francis Conlin was born in Schenectady, New York, in 1908. His father was a research metallurgist with the General Electric Company. He was educated in the public schools of Schenectady and attended the Holy Cross Preparatory School from 1923 to 1926.

From 1926 to 1932 he was under monastic orders in the Passionist Monasteries at Dunkirk, Springfield, Scranton, Baltimore and Boston. In 1932, he decided that he was more fitted for the study of medicine than for a career in the Church.

He, therefore, returned to the secular life, attended Boston College from 1932 to 1934, receiving the degree of Bachelor of Science, and attended Tufts College Medical School from 1934 to 1938. He was president of his class throughout the four years of medical school and was chairman of the Student Activity Board during his senior year. On graduation, he received the "Alumni Award" of the medical school.

He served an internship in 1939 and 1940 at St. Elizabeth's Hospital in Brighton and served as resident at the John Adams Hospital in Chelsea from 1940 to 1941. He entered active duty with the Army in 1942; he went overseas in 1944; he returned a lieutenant colonel in 1945 and was discharged with a full colonel's rating in 1946.

During the 1945–1946 season, he came to the attention of several committees in the Society because of his assignment to fight the Antivivisection Bill before the Legislature last year. During part of this period he worked with the Veterans Administration and in the fall of 1946 he entered the Harvard School of Public Health.

He joined the Massachusetts Medical Society in 1941 and he was elected a Councilor in 1946. He was appointed to the Committee on Arrangements last spring in recognition of the splendid job he had been doing on the antivivisection legislation.

At the meeting of the committee on September 20, it was decided to interview Dr. Conlin either individually or in groups.

A meeting was held on November 14. At that time Dr. Conlin had been interviewed by all members and had made a most favorable impression on the majority of the committee. Discussion ensued as to his qualifications, his duties, salary and so forth. It was voted that the President and President-Elect, as a subcommittee, interview Dr. Conlin regarding salary, not to exceed $10,000, and that if satisfactory financial arrangements developed, he be nominated for the position of Director of Medical Information and Education.

From the report of this subcommittee, the Committee of Seven makes the following recommendation to the Council:

The Committee of Seven proposes that Dr. John Francis Conlin be appointed by the Council as Director of Medical Information and Education.

Dr. Conlin will be available at the close of the school year, and it is recommended that he begin as of July 1, 1947, at the salary of $7,500 per annum, plus ordinary traveling expenses, and with appropriate vacation periods. If his services are satisfactory and if he is satisfied with the work as it develops, he is to receive an increase of $500 on January 1, 1948, and on each January 1 thereafter until the maximum salary of $10,000 would be reached on January 1, 1952. If there should be gross inflation in our national economy, adjustments should be expected. There should also be an understanding concerning a mutual termination of the agreement.

It is recommended that legal counsel be asked to draw up a written agreement which would embody these general terms.

APPENDIX NO. 9

Report of the Committee to Study Increase in Assessment of Dues

The committee held a formal meeting on Sunday, December 8, 1946, at 2:30 p.m. There were present Dr. Edwin Gardner, Marion, Dr. John W. McKoan, Worcester, Dr. Kenneth L. Maclachlan, Melrose, and Dr. Frank R. Ober, Boston. Dr. N. Newall Copeland, Pittsfield, was absent.

The members were written to on November 7, 1946, and advance information was sent each one relative to annual dues of all the New England state medical societies and the Massachusetts Dental Society, as well as the Treasurer's report at the last annual meeting. No reply was received from the absent member, although two letters were written to him.

In discussing the matter of increasing the annual assessment, your committee considered:

1. The present cost of running the Society.

2. The raising of salaries of the central office personnel.

3. The raising of the salaries of the Treasurer, Executive Secretary, Secretary and Miss Gaston.

4. The salary and expenses of the Director of Medical Information and Education.

5. The possibility that the office of the Secretary of the Society be made full time and receiving adequate compensation therefor.

6. The relation of the Boston Medical Library to the Massachusetts Medical Society.

7. The advisability of some form of financial support to widows and orphans of physicians.

8. The advisability of financial aid to certain physicians incapacitated by chronic illness or some other cause and unable to support themselves and their families.

9. A retirement fund for the full-time workers of the Society.

10. The fact that the present headquarters are totally inadequate for the transaction of the Society affairs. There is only one room for committee meetings.

11. A long-range plan to establish a headquarters which will house the Society.

These paragraphs are discussed in some detail as follows:

1. Given a membership of 6000 and dues of $10.00 per year, plus excellent general economy, the Society can manage, but this does not allow for critical expansion which is needed right now. In bad times, there would not be enough without jeopardizing the general fund.

2. Salaries of the clerical force have been raised this year and the clerical force has been increased. The present cost per year is $5,876, an increase of $312.

3. The yearly compensation of the Treasurer is now $2,500, of the Secretary, $4,000, of the Executive Secretary, $4,800, and of Miss Gaston, $2,184 — a total of $13,484. The total increase of salaries is $2,996.

4. It has been recommended by the Committee of Seven that a Director of Medical Information and Education be secured at a salary of $7,500 for the first year, which is to be increased by $500 each year until a maximum of $10,000 is reached. In addition to this sum, there must be added an indefinite sum for necessary expenses. This position is to start July 1, 1947.

5. Your committee is of the opinion that the time has arrived when it is to the best interests of the Society to consider seriously the advisability of having a full-time secretary on a more permanent basis than exists now. An adequate salary must be provided to meet this situation. The duties of the Secretary's office are increasing steadily and some time in the not-too-distant future it will be a continuous performance. The office of a full-time secretary would be open all the time in order that physicians may be able to seek advice of the secretary any weekday. This would in itself make the Society more valuable to its members.

6. The relation of the Boston Medical Library to the Massachusetts Medical Society was considered at some length. The Boston Medical Library is in need of financial assistance. It is believed by your committee that the Library is a real asset to the Massachusetts Medical Society. If through lack of sufficient income, it became necessary for the Library to close its doors, the whole medical profession of the Commonwealth would suffer.

The trustees of the Library have tried to get needed help from many sources, but without success. This is the third largest and one of the oldest medical libraries in the United States. Its membership is small — nine hundred and thirty-two. Its dues are $15.00 per year. It is used by a great many who pay nothing, and many of these will not become members because they get service free. This situation is unfair to the Library and those loyal members who do pay. The Library can be made useful to every member of the Society.

The *New England Journal of Medicine*, which is owned and run by the Massachusetts Medical Society, is a constant user of the facilities of the Library. This is an important factor in the publishing of the *Journal*, because bibliographies of articles must be checked. The fact that the Library is in the same building as the *Journal* makes this easy and saves a great deal of expense and time. This would not be true if there were no Library available.

This is a distinct asset to the Society and is one of the many reasons why the *Journal* is having so much success and a constantly increasing distribution. It would seem, therefore, that the Library is a real asset to the Massachusetts Medical Society for which there does not seem to be an adequate return. It is recommended that the Society subsidize or otherwise help the Boston Medical Library so that this valuable institution will not go under.

7. The committee recommends that some form of financial support be made to needy widows and orphans of physicians.

8. It further recommends that a fund be set up to aid and assist those physicians who through no fault of their own find themselves incapacitated through illness, injury or age, and are not able to support their families. The Massachusetts Benevolent Society has an income of $5,000 a year and is at present helping seventeen people who fall into this category. This society would probably be willing to integrate their fund with any proposed plan of the Massachusetts Medical Society.

9. There should be also a retirement fund for the full-time members of the central administrative office of the Society.

10. The present office space is totally inadequate for the proper conduct of the business of the Society. There is only one room in the building available for committee meetings; therefore, many meetings are held outside the building and at some extra cost. It would be to the advantage of all concerned could they be held at the headquarters.

The Headquarters Committee voted that the Society secure more room from the Library by helping the Library to construct stacks for books and so forth that are stored on the floors and against the walls of the building, thus taking up space that would be freed could the Library afford to construct stacks and secure more help in placing and cataloging these books. This would give us more urgently needed rooms for meetings and business purposes and would be a distinct help for the present.

11. Your committee is in sympathy with the proposed plan of the Headquarters Committee of the Society. This proposed plan is a long-range one and depends largely on securing a site near the Library and the *Journal*. The Massachusetts Medical Society should have a home adequate to take care of all the facilities of the Society for at least fifty years. This means sufficient office and committee rooms, a larger banquet hall for the Council, a kitchen for the benefit of the working officers and clerical help at the headquarters. The possibility of an auditorium large enough to hold the annual meeting might well be considered. Smaller meeting rooms in the same building would be necessary.

With this long-range plan in mind, an increase in the annual assessment might be a good thing to do now, so that a portion of such increase could be set aside and allowed to accumulate as a sinking fund to be used in any new additions or construction of adequate facilities for the future.

The present dues are $10.00 per annum, which includes the subscription to the *Journal* and the "turnback" to the dis-

trict societies. A questionnaire on dues was sent to the New England state medical societies, as it was thought that information on this subject would be valuable to us all. The following information was obtained:

New Hampshire Medical Society ..	$10
Maine Medical Association	35
Rhode Island Medical Society	40 ($25 first year of practice)
Connecticut State Medical Society..	20
Vermont State Medical Society ...	35 (of this, $5 is earmarked for needy physicians)

In summary, it appears that an increase in dues will be needed for the following reasons:

1. To meet our old obligations and our new obligations.

2. To provide a fund or funds for retirement purposes as recommended.

3. To help the Boston Medical Library and increase the room of the present headquarters.

4. To develop a building fund.

5. To provide a sinking fund in order to take care of needy physicians.

The committee has recommended that the annual dues be raised to $20.00. After reviewing the suggestion for future plans for the Society, it may be necessary to raise the dues to $25.00. With such a program as above outlined, it will probably be necessary to make further study in order to present a comprehensive plan covering all contingencies for the present and the future. The dues should be raised sufficiently so that it will not be necessary to raise them again.

APPENDIX NO. 10

Report on the Transactions of the House of Delegates of the American Medical Association

The following is a report of the supplementary meeting of the House of Delegates of the American Medical Association at Chicago December 7, 8 and 9. This is the first such meeting ever held not of an emergency character. Its purpose is to lighten the amount of work to be done at the annual meeting.

There was a full attendance of delegates. An interesting international note was the dropping of the representation from the Philippine Islands. These islands now constitute an independent state. At this meeting there were no addresses by the various officers, and the House proceeded at once to the matters at hand (and there were many). It was stated that the membership had increased by 3374, the total now being 129,145. Reference committees were immediately appointed by the Speaker, and as usual their work was long and exacting in most cases.

On the morning of the first day, there were given to each member copies of the so-called "Rich Report" and of the report of the Interim Committee, this committee having been appointed to analyze and make recommendations as to acceptance or rejection of many recommendations in the Rich Report. It might be of interest to know something of this whole affair.

Early in 1946, the trustees of the American Medical Association employed the Rich Associates (investigators of nonprofit organizations only) to make a survey of the entire organization of the American Medical Association, with recommendations for its greater usefulness, especially along the lines of public relations. About five months were spent on this survey. It was briefly alluded to by Dr. Sensenich, president of the Board of Trustees, on the last afternoon of the annual meeting of the House of Delegates in San Francisco. He stated that the report had just lately been received, and that the House of Delegates was merely being informed briefly as to what in general it contained. This was not too satisfactory an arrangement or disclosure, and left the members in a state of critical curiosity as to just what this Rich Report contained. One may say that this statement by Dr. Sensenich was not too well timed. To offset this, the Speaker of the House later made the Committee on Executive Sessions, which had completed its work in San Francisco, an interim committee. This committee consisted of Bates, of Pennsylvania, Carey, of Texas (who never came to any of the meetings), McGlendon, of California, Lewis, of New Jersey, Hein, of Ohio, Bunce, of Georgia, and Scannell, of Massachusetts. This committee met with the trustees at Chicago in September, 1946; again met as a committee alone on December 7 in Chicago; and with the Board of Trustees on Sunday, December 8. The committee's report was then prepared and delivered to the House of Delegates on Monday morning. It was felt that this report of ours might be the high spot of the transactions of the House of Delegates and that is just what it proved to be. The House of Delegates went into Executive Session on Tuesday morning and discussed paragraph by paragraph both the Rich Report and the report of the Interim Committee. This consumed a good portion of Tuesday. We had felt that the portion of our report having to do with relations of the National Physicians Committee and the American Medical Association might prove most controversial, and that actually was the case. We recommended that this relation be studied further, and this was agreed on. The same committee, after giving the matter continued study, is to report to the House of Delegates in Atlantic City in June, 1947. Incidentally, the Rich Associates have been hired as continuing counsel to do the work suggested in their report (except as modified by the House of Delegates) for one year. Many of their recommendations were excellent; others were not so acceptable. The latter were rejected. Matters pertaining to public relations and publicity emanating from the Rich Associates are to be cleared through the office of the General Manager. The recommendations of the Committee were well received and practically universally accepted, and did much, we feel sure, to facilitate progress and to evaluate the report and its recommendations. It would take much too long to enumerate all the recommendations in this report, but the keynote of them all is to separate distinctly the functions of scientific interpretation, medical economics, socialized medicine, and the direction of public relations. They may be summarized as follows:

Vitalization of Hygeia *for the reading public.*

Bureau of Medical Economics. In this connection, there has been appointed a Mr. Dickinson as Director of Economic Research (an admirable selection).

Public Relations. More positive type of program required; more publicity for the reading public, always, however, to be cleared through the office of the General Manager.

Health Education. An instrument of great potential importance in public relations, not yet exploited to the full, with radio, various publications, releases and so forth. This whole subject to be greatly expanded with closer liaison between state and county societies and volunteer service plans.

Council of Medical Service. Expansion of these activities with conferences on invitation from constituents or component societies at local levels.

News Letter. To be further improved and given wider dissemination.

Council of Industrial Health. More attention to be paid to industrial and consumer groups, in view of recent developments in connection with the United Mineworkers' Health Fund and similar labor, management and consumer groups.

Radio. Employment of junior radio specialist, backed by highly experienced professional counsel, if, after study, it is justified by need and cost (an expensive item).

Speakers' Bureau. This should be utilized to its fullest capacity and should be implemented by conferences with state organizations.

Prepayment Medical Care. At the present time, there are five million members enrolled and all the states but two have plans in operation.

The Women's Auxiliary. The recommendation that this be developed in states where it is not now in operation.

It must not be thought that this consideration of the Rich Report was the only subject on the agenda, but to state them all would be unprofitable. The minutes of this supplementary meeting will not be printed in the *Journal of the American Medical Association* until sometime in January,

1947. Just how much of the Rich Report will be printed in the minutes is problematical, but the findings and recommendations of the Interim Committee will probably be printed in full.

Announcement of plans for the Centennial Meeting at Atlantic City in June were made by the proper committee; a most extensive program has been lined up along all lines, and even now all the details of speakers and subjects have been worked out. All give promise of an ideal centennial meeting. Dr. Lull, as secretary and general manager, is working out satisfactorily, having at all times the invaluable help of his predecessor, Dr. Olin West.

Admiral Joel T. Boone, head of the Investigating Board in the United Mineworkers' problem appeared by invitation before the House of Delegates. His discussion of this rather incomplete report was given in executive session; the report is not yet finished, and he could not definitely state all the findings, but he did state enough to give us considerable concern about the health conditions existing in many of these soft-coal mining areas. Admiral Boone is a man of keen and analytical mind and eminently humane and fair. He stated that there is a great field here for the American Medical Association in health education, public relations and needed co-operation with the physicians working in those fields. His talk took well over an hour. At the end, he himself gave what he thought was a fair release of those portions of his remarks to which he felt the public was entitled.

Obviously, I have omitted many items that deserve comment in the transactions on Monday, Tuesday and Wednesday, but you must refer for these to the printed minutes. All in all, it was a most profitable meeting and demonstrated the wisdom of having interim meetings between the annual meetings of the House of Delegates.

DAVID D. SCANNELL

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

Weekly Clinicopathological Exercises

FOUNDED BY RICHARD C. CABOT

TRACY B. MALLORY, M.D., *Editor*

BENJAMIN CASTLEMAN, M.D., *Associate Editor*

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CASE 33161

PRESENTATION OF CASE

A twenty-year-old American tool worker entered the hospital because of swelling of the right lower leg.

The patient had had no trouble until six weeks before entry, when he noted the gradual onset of painless swelling about the right ankle. There had been no preceding injury. He stopped work for three days, and the swelling decreased, only to recur when he returned to work. Five weeks before entry the swelling became localized in the posterior and lateral portions of the lower leg, just above the ankle, and he began to have an aching pain in this region. The pain was brought on by dorsiflexion of the foot, which "stretched the skin" over the swelling; it never troubled him at night. The patient consulted a physician, who found that he had a temperature of 100°F. and started him on oral penicillin therapy. The patient failed to improve and consulted another physician, who took x-ray films of the leg and told him that he had a "tumor." He had lost 13 pounds during the half year before entry.

Physical examination showed a hard irregular mass, about 15 cm. in diameter, surrounding the lower third of the right fibula and presenting mainly on the posterior and lateral side of the leg. It did not involve the joint and stopped just above the lateral malleolus. An infiltrating projection appeared to run beneath the Achilles tendon and jutted out on the posteromedial aspect of the leg as a nodule about 7 by 2 cm. in size. Dorsiflexion of the foot could not be carried out beyond an angle of 85°, whereas the left foot flexed to 70°. The other motions of the ankle, including plantar flexion, were normal. The skin over the lateral aspect of the leg was slightly dusky in color. There were soft to firm lymph nodes measuring up to 2 cm. in diameter in the axillas, left inguinal region and both saphenous regions. Otherwise, the examination was not remarkable.

The temperature was 98.6°F., the pulse 104, and the respirations 20. The blood pressure was 154 systolic, 94 diastolic.

Examination of the blood revealed a hemoglobin of 16 gm. and a white-cell count of 13,400, with 79 per cent neutrophils. X-ray examination showed a soft-tissue mass about the right lower fibula into which irregular spicules of bone extended from the fibula. The margins of the bone were slightly irregular and indefinite, and there was a suggestion of periosteal-layer formation. The medullary structure was disorganized, and the cortex had a somewhat moth-eaten appearance. Examination of the chest was negative.

Operation was performed on the second hospital day.

DIFFERENTIAL DIAGNOSIS

DR. ERNEST M. DALAND: This patient's physician immediately thought of osteomyelitis and, with the slight degree of temperature, was justified in trying penicillin. The loss of weight apparently antedated the first symptoms in the leg. I should like to ask whether there was any determination of the calcium, phosphorus and phosphatase.

DR. TRACY B. MALLORY: The calcium was 10 mg. per 100 cc. It was impossible to determine the phosphorus and phosphatase because of hemolysis.

DR. DALAND: May we see the x-ray films?

DR. TOUFIC KALIL: The soft-tissue mass is projected mainly posteriorly and involves the lower half of the leg down to the articular surface of the

fibula. The lower two thirds of the fibula shows a destructive process involving both the cortex and the medullary structure. The periosteum of the lower end of the fibula is raised and has formed new bone. For most of its length, the tumor mass is entered by narrow, irregular, calcified spicules projected at right angles from the shaft of the fibula. The tibia is not involved.

FIGURE 1. *Photograph of Fibula and Tibia.*

At the right may be seen the sectioned tumor in the lower end of the fibula, as well as the sectioned normal tibia.

DR. DALAND: Are we dealing with infection or with tumor? If a tumor, was it malignant or benign? I do not believe that we have enough evidence to make a diagnosis of infection. The x-ray films do not suggest osteomyelitis to me. The temperature and the systemic findings are not severe enough for osteomyelitis. I do not know how long the penicillin was continued or how complete the therapy was. We are told that the patient did not receive any benefit from it, but we should not expect him to unless the drug was given in large amounts for a considerable time.

I think that this case comes down to a diagnosis of Ewing tumor or osteogenic sarcoma — the raised periosteum is always suggestive of the former, and the destruction of the cortex can be due to either one or the other. The soft-tissue mass is not easily seen in the film but does not seem nearly so impressive as one would expect with a mass 15 cm. in diameter. There is not so much new-bone formation in the mass as I should expect in an osteogenic sarcoma. I am inclined to think that this was a Ewing tumor.

This is a difficult diagnosis to make on frozen section, as has been said before. If I were going to treat this patient I should do a biopsy and wait until the pathologist had got his final sections through before going ahead with amputation. I recall a case like this in a man on whom a diagnosis of Ewing tumor was made preoperatively by the radiologist, by the surgeon who operated and by the pathologist on frozen section. A few days later the decision was changed, and the diagnosis of chronic osteomyelitis was made, after the arm had been amputated. I consider it important in doing a frozen section that the surgeon assume the responsibility of the diagnosis, share the responsibility of the gross diagnosis with the pathologist and bear with him in his difficulty in making a diagnosis on frozen section. I prefer to wait and do a radical operation after all the opinions are in.

I believe that the diagnosis in this case is a Ewing sarcoma.

DR. MALLORY: Dr. Taylor, you saw this patient; have you any comments?

DR. GRANTLEY W. TAYLOR: I went through the same process of reasoning as Dr. Daland did. We find constantly in bone tumors that we cannot make a diagnosis by palpation. I sympathize therefore when the pathologist has to make it histologically, but it seemed obvious that the patient in the case under discussion had a malignant tumor of the leg, and the differential diagnosis restedbetween an osteogenic sarcoma and a Ewing tumor. We included both in our preoperative diagnosis, believing that the pathologist could make that decision on frozen section or could at least decide that it must be one or the other and rule out benign conditions. I am interested in Dr. Daland's anecdote in which amputation was carried out forosteomyelitis, because I had supposed that an adequate section would reveal whether one was dealing with neoplasm or an inflammatory condition.

CLINICAL DIAGNOSIS

Osteogenic sarcoma of fibula?
Ewing tumor of fibula?

DR. DALAND'S DIAGNOSIS

Ewing sarcoma.

ANATOMICAL DIAGNOSIS

Ewing tumor of fibula.

Pathological Discussion

Dr. Mallory: One of the real problems when a frozen section is done on a bone lesion is that the specimen is likely to contain spicules of calcified material that prevent an adequate section. A frozen section was done during operation on this patient, and the pathologist was certain that the tumor was malignant but uncertain regarding the type, although he favored osteogenic sarcoma because a considerable amount of new-bone formation was recognized. When the final sections came through, however, it was quite obvious that the bone formation was in the stroma and periosteal remnants. No bone was being formed by tumor cells. The latter were of the type characteristic of Ewing tumor, which was the final diagnosis of this case. The tumor had destroyed the lower third of the fibula and had elevated the periosteum as far up as the midpoint of the shaft (Fig. 1).

CASE 33162

Presentation of Case

A twenty-nine-year-old Italian housewife entered the hospital because of lower abdominal pain, chills and fever.

Four years before entry the patient had had a bout of crampy pain in the right lower quadrant of four months' duration. This was treated conservatively until she had a sudden increase in severity of the pain associated with vomiting, chills, fever and the passage of clots and brownish liquid by vagina; laparotomy was then performed at another hospital. The appendix was found to be retrocecal and held down by a few adhesions but was otherwise normal. The right fallopian tube and right ovary formed an adherent inflamed mass low in the pelvis. When this mass was freed, a few drops of thick pus escaped; this was removed with suction. The markedly swollen and injected right tube was removed. The left tube and ovary were normal. There was drainage from the abdominal wound for five months, but the symptoms were completely relieved. Eighteen months before entry the patient had been delivered of a normal full-term infant. The post-partum course was uneventful. For six months before entry she had had a profuse, malodorous leukorrhea requiring daily douches. Six weeks before entry the last normal menstrual period had occurred. Three weeks before entry she was in a minor automobile accident in which the left lower abdomen was struck against the steering wheel. She suffered no great discomfort from this but noted a slight amount of vaginal bleeding that night and the following day. Six days before entry the patient again had some slight spotting. On the following day, while doing her housework, she was suddenly seized by a violent griping pain in the left lower quadrant that was severe enough to cause her to lie down, to "thrash about" and to vomit repeatedly. At the same time she began to pass brownish fluid and blood clots by vagina. After one or two hours of vomiting she fainted, collapsing on the floor. She regained consciousness after a few minutes. A physician was called, and the pain was somewhat relieved by a hypodermic injection; it gradually became less crampy and more general, involving both flanks and the entire lower abdomen. Vomiting and retching persisted, although no food was taken. The patient also continued to have scanty vaginal bleeding. On the day before entry she began to have shaking chills, and temperature rising to 104°F. She had had no pain or burning on urination, frequency or nocturia. The bowels had been regular except for obstipation since the start of the acute episode.

She had begun to menstruate at the age of twelve years, and the periods had always been rather irregular, occurring at an interval of twenty-five to thirty-one days and lasting about three days. She had never lactated properly and had not nursed her last child.

Physical examination revealed a slightly built, poorly nourished woman lying in bed restlessly and complaining of headache and occasional sharp pains in the left lower quadrant. She was somewhat disoriented regarding time. The skin was dry and cool. The lungs were clear. There was moderate diffuse abdominal tenderness most marked in the left lower quadrant, where a vague mass could be felt. The posterior fornix of the vagina was full of dark-brown, liquid blood. The cervix was firm. The uterus was normal in size.

The temperature was 101°F., the pulse 90, and the respirations 20. The blood pressure was 110 systolic, 20 diastolic.

Examination of the blood showed a hemoglobin of 11.0 gm. and a white-cell count of 22,200. The urine was normal. The vaginal discharge was negative for beta-hemolytic streptococci and gonococci by smear and culture.

Under penicillin therapy the temperature dropped to normal in three days. On the third hospital day she had another episode of vaginal bleeding, passing clots for an hour and continuing to spot slightly. On the fifth hospital day she was completely free of abdominal complaints. The white-cell count had dropped to 18,800. Two days later, the mass in the left vault was found to be considerably decreased in size, moderately movable and no longer confluent with the uterus.

On the tenth hospital day an operation was performed.

Differential Diagnosis

Dr. Fred A. Simmons: I am unable to understand, how, with the condition of the patient on admission to the hospital, an operation could have been postponed until the tenth hospital day. The

surgeon had a great deal of courage to wait that long.

The history revealed a proved diagnosis of pelvic inflammation, with pus exuding from one tube, three years before the present admission. In spite of that proved pelvic inflammation or salpingitis, a normal full-term pregnancy had occurred eighteen months previously, and the menstrual period was two weeks overdue on admission, although she had been having irregular, spotty vaginal bleeding during the interval.

Five days before entry the patient had an intraperitoneal accident of some kind that was severe enough to cause vomiting, severe pain and unconsciousness. Someone had the temerity to administer a hypodermic injection without operating on her. On the day before admission she had chills and a temperature of 104°F., associated with continuing abdominal pain. On admission a mass was palpated. I am emphasizing these points — inflammatory disease, delayed menstrual period, abnormal metrorrhagia, elevated white-cell count and a mass palpable on abdominal and pelvic examination — because by definition alone it is impossible to rule out an ectopic pregnancy. I believe that it is the policy of the gynecologic service to consider such a condition ectopic pregnancy, and operation was indicated at that time. A possible reason for the delay in operation was that the diagnosis lay between ectopic pregnancy, pelvic inflammation, twisted ovarian cyst and some other pelvic infection, such as tuberculosis, and that the results of the Aschheim–Zondek test were awaited. According to the history the Aschheim–Zondek test could have been negative or positive — negative if there was no viable placental tissue but positive if viable products of conception were still present.

In 1945 at one of these conferences, I discussed the case* of a woman in her thirties with a history of metrorrhagia associated with pelvic findings similar to those in the case under discussion. I failed to make the correct diagnosis, which was tuberculosis of the tubes, because it had not been my experience to find abnormal menstrual bleeding with tuberculosis of the pelvic viscera. The usual history is one of amenorrhea. At any rate, tuberculosis must be considered in this patient because she was described as being poorly nourished and because she had a pelvic infection. About four years ago there was a patient on the wards with a finally proved diagnosis of actinomycosis of the tubes who had some of the same findings — namely, drainage from an abdominal wound for weeks or months following a pelvic operation and a mass, with cachexia, fever and high white-cell count. About thirteen years ago, in the Emergency Ward, a patient was admitted who had had a two-month history of abdominal pain, flowing and a mass, and for some reason or other no one mentioned ectopic pregnancy. At operation 200 cc. of old blood was found in the peritoneal cavity, and the diagnosis of ectopic pregnancy was unmistakable.

The record does not state whether the appendix of the patient under discussion had been removed at the initial operation. If not, one could not fail to consider appendicitis as a cause of the symptoms. The history indicates that the right ovary was not disturbed at the initial operation at which the right tube was removed. Therefore, if the patient had had tuberculosis of the right tube, the other tube or the ovaries, or both, may have been involved. The drainage from the abdominal wound points toward tuberculosis. I paid particular attention to the fact that there was sufficient insult to the peritoneal cavity five days before entry to cause vomiting and unconsciousness as evidence of an acute pelvic process of some kind, such as perforation of a pus-containing sac or a blood-containing sac.

After penicillin therapy, the temperature dropped to normal in three days. If a patient has acute pelvic inflammation and is given chemotherapy, the symptoms subside, the temperature becomes normal, the tenderness disappears and the patient appears well, although a smoldering infection may continue in the adnexa that may flare up weeks, months or years later.

I do not see how we can get away from the facts that the patient was flowing abnormally, that the menstrual period was overdue at the time of admission and that she had a mass. The size of the mass is not described in the record of the pelvic examination, but the statement is made that the mass had "considerably decreased in size" on the seventh day.

As often happens in these conferences the diagnosis entertained on the first reading of the record remains the last, and on the basis of the history and on the physical findings, I must make a diagnosis of ectopic pregnancy.

DR. TRACY B. MALLORY: Dr. Sturgis, will you give us your impression of the case?

DR. SOMERS H. STURGIS: I might say that the clinical impression when the patient was first seen was a little more definite than the record indicates, in that the mass was definite, fairly large and fluctuant. On pelvic examination we considered it characteristic of a tubo-ovarian abscess. We were not so impressed as Dr. Simmons has been by the overdue period and the bleeding, and I think that we may have missed something. At that time, with the history of inflammation in the past, the clinical appearance of the patient made us think that she had a tubo-ovarian abscess and we were interested to see how it would respond to penicillin. We were pleasurably surprised when the mass decreased in size and became more movable under that treatment.

*Case records of the Massachusetts General Hospital (Case 31152). *New Eng. J. Med.* 232:432-434, 1945.

DR. JOE V. MEIGS: Is it not true, however, that patients with pelvic inflammatory disease frequently have follicular cysts of the ovary and fall into the group of patients that simulate metropathia, without amenorrhea, followed by bleeding? Is that not characteristic, particularly with chronic pelvic inflammation?

DR. STURGIS: That is why we did not pay too much attention to the irregularity.

DR. MEIGS: Dr. Younge, do you agree that this case is consistent with the picture one sees with chronic pelvic inflammation?

DR. PAUL A. YOUNGE: Yes.

DR. MALLORY: Will you describe the operative findings, Dr. Sturgis?

DR. STURGIS: Operation disclosed a tubo-ovarian mass plastered to the uterus, with dense adhesions. In view of the previous history of five years of inflammation we believed that a hysterectomy was indicated. That is the reason for the removal of the uterus, as well as the mass, which we did not open at operation. We did not suspect anything more than inflammation when the operation was performed.

DR. SIMMONS: Had the right ovary and the appendix been left in at the first operation?

DR. STURGIS: The ovary had not been removed, but I cannot remember about the appendix.

DR. SIMMONS: Was an Aschheim–Zondek test done?

DR. MALLORY: No.

CLINICAL DIAGNOSIS

Tubo-ovarian abscess.

DR. SIMMONS'S DIAGNOSIS

Ectopic pregnancy, left fallopian tube.

ANATOMICAL DIAGNOSES

Acute and chronic salpingo-oophoritis.
Placental polyp.

PATHOLOGICAL DISCUSSION

DR. MALLORY: The tubo-ovarian mass was a purely inflammatory lesion, but on opening the uterus we found a small reddish polypoid mass in the fundus, which proved to be a placental remnant. The patient had been pregnant, but it had been an intrauterine rather than an extrauterine pregnancy.

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PNEUMOCOCCAL PNEUMONIA

Many physicians with long experience have been impressed with the steady decline in the occurrence of pneumococcal pneumonias in recent years. Although reliable figures of incidence are not available, it is apparent from mortality statistics either that the disease has become less frequent or milder or that modern general management has become increasingly effective, because the decline in mortality antedates the widespread use of recent antibacterial therapy. In Massachusetts, for example, there was a decline of almost 50 per cent in the death rate from pneumonia between 1920 and 1930, as compared with the fairly stable rates recorded in the two preceding decades.[1] In more recent years the drop in mortality has been even more striking. Thus, the deaths from all forms of pneumonia per 100,000 industrial policyholders was 69.8 in 1936, 44.6 in 1940 and 25.9 in 1946, having been 115.2 in 1911.[2] In the last decade, moreover, pneumonia of all forms (mostly pneumococcal pneumonia) has dropped from third to eighth place among the leading causes of death.[3]

Unfortunately, accurate figures dealing specifically with large groups of patients with pneumococcal pneumonia are becoming increasingly difficult to assemble. The wide therapeutic range of sulfonamides and penicillin offers too little incentive for the effort required to do careful bacteriologic studies, including pneumococcus typing. Furthermore, these forms of therapy are now generally applied early, as they should be, but bacteriologic studies are all too often undertaken only when the results of therapy do not seem to come up to the physician's expectations. By that time the bacteriologic results may be vitiated by the effects of therapy.[4,5]

It may not be amiss to point out that it is still important to carry out or at least to obtain materials for bacteriologic studies before treatment with antibacterial agents is begun. The results may prove helpful both in prognosis and in the conduct of the therapy. Although pneumococcal pneumonia can be diagnosed from clinical findings with considerable accuracy,[6] this may not be true early in the disease, when treatment is most effective both in saving life and in preventing serious complications. The management varies appreciably when a staphylococcus, Friedländer bacillus or *Haemophilus influenzae* is the causative organism. Staphylococcal pneumonias require larger doses of penicillin, and treatment must be continued longer than in pneumococcal cases. The other two forms may not be frequent, but their seriousness, their failure to respond adequately, if at all, to sulfonamides and penicillin and the availability of streptomycin, which may be highly effective if properly used, make it essential to recognize them as early as possible. This can be done only bacteriologically. Gram-stained smears of sputum are simple to make and offer the easiest and fastest means of recognizing the less frequent forms of bacterial pneumonia. The results can then be confirmed by routine cultures. Blood and sputum should therefore be obtained for that purpose before treatment is started, but therapy need not be delayed until the results are available.

A Wright-stained smear of the sputum may also give useful information. The predominance or presence in appreciable numbers of either eosinophils or mononuclear cells, especially if bacteria are absent or scant, suggests a nonbacterial etiology. Eosinophils point to either a parasitic or an allergic agent, and mononuclears, to a viral infection. In either event the failure of antibacterial therapy can thereby be predicted or explained.

The treatment of the patient as a whole, with all his symptoms and manifestations, is still highly important in pneumococcal pneumonia. This is particularly true in infants, in the aged and in those who are severely ill or have serious complications, such as congestive heart failure. One can take little solace from the fact that autopsy reveals no evidence of residual active infection following proper antibacterial therapy in a patient who died of some physiologic disturbance whose correction might have resulted in recovery.

Regarding the optimum specific therapy for pneumococcal pneumonias there is evidence that penicillin is slightly more effective than sulfonamides when used separately[7] and that both agents, either combined or used to supplement one another, are somewhat more effective than either agent alone.[8,9] The latter conclusion is based on observations with what may now be considered small doses of penicillin, there being no adequate reports on the use of large doses. For adults, doses equivalent to 30,000 units or more intramuscularly every three hours in early and uncomplicated cases of moderate severity, or up to 100,000 units every three hours in severe bacteremic cases, especially when there are hidden or manifest purulent complications, may give effects that cannot be improved on by the addition of sulfonamides. In meningitis, however, the use of a sulfonamide as an adjunct is probably essential. The possibility of infections with penicillin-resistant strains is still only hypothetical, and sulfonamides would become essential if that eventuality arose. Theoretically, specific antipneumococcus serums should also be helpful, but that has not proved to be true in practice.[8]

Lest the wrong impression be created, it should be emphasized that the doses of penicillin mentioned are far in excess of those required by the great majority of patients. For them, as little as 15,000 units intramuscularly every three hours is adequate. The larger doses are needed for the sickest patients, among whom the fatalities are likely to occur. It should be added that oral penicillin in doses of 50,000 or 100,000 units every two or three hours, with care to avoid giving them within one and a half to two hours after a meal, is effective in most cases of moderate severity.[10,11] Oral therapy may also prove useful in infants and children.[12] Furthermore, daily intramuscular injections of 300,000 units in peanut oil and beeswax may also give a satisfactory result in the average case. In moderately or severely sick patients, however, oral doses cannot be relied on, and the oily preparation should probably not be used or should be given twice a day until the infection has been completely controlled. In all cases, treatment should be continued after apparent recovery with the same or somewhat smaller doses for three to five days, and longer when there are complications.

Repeated local instillations of penicillin into purulent foci afford the most effective therapy for purulent complications, whenever feasible. As much as 50,000 units or even more may be instilled in 10 cc. of physiologic saline solution intraspinally or into a joint, and up to 300,000 units in 50 to 100 cc. of saline solution may be given intrapleurally each time, the instillations being continued daily in most cases until the infection is well under control. Much smaller doses, however, are usually adequate. Operative drainage can thus be avoided in the majority of cases of empyema.[13] Systemic therapy is continued, in addition, if the pulmonary infection has not been fully controlled.

The case fatality rates in cases of pneumococcal pneumonia properly treated with sulfonamides and penicillin is now almost zero in young and middle-aged adults and has been reduced to 10 or 15 per cent in those over forty years of age.[7–9, 14]

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THE VALUE OF WELL DIRECTED ENDEAVOR

ANNUAL reports are generally written for public consumption. Reading the reports of philanthropic foundations that spend in excess of a million dollars each year may lead one to contemplate the validity of their work — for it is fully as difficult to spend money usefully as it is to make it honestly. Occasionally, the report of a great foundation is tinctured by a sense of humility, and the smallness and the ineffectiveness of what a mere million dollars can buy are thus apparent. The twenty-eighth annual report of the Commonwealth Fund is an example.

The bridge is seldom made between what needs to be done on a large scale and what may be demonstrated in a small pilot study. This is not because the disproportions are so great but rather because the conditions, raw materials and general circumstances cannot be reproduced for the larger applications. We do not fail because we have not been shown how to do things better but because we cannot reproduce in volume the selected circumstances under which we make the initial experiment. Unless we can conduct the trial studies with the same raw materials with which they will later have to be enlarged, we work in ivory towers; however interesting the interiors of these towers may be to the privileged few, the world outside is steered by larger masses. Most foundation boards would agree that the late William H. Welch was an outstanding contributor to the welfare of mankind, but in the recent biography of Harvey Cushing it is related that a Mr. Johnson, Welch's home-town pharmacist, although admitting that "Willy did pretty well down south in Baltimore," thought that he never compared with his father, a country doctor. There are many more Mr. Johnsons voting than there are directors of foundations, and the experiments of the latter may not be convincing enough to be implemented by the masses on a large scale.

Educators universally encourage the idea that each individual can by aspiration and perspiration raise himself to the top, but their tongues are in their cheeks; with Robert Schumann, they know that "nature would burst should she attempt to produce nothing save Beethovens." Educational institutions also proclaim, with institutional tongues in their cheeks, that they create leaders. They do nothing of the sort. Leaders are born to flourish, some in one environment and some in another, and in a variable but small ratio to the numbers of people whom they lead. An institution that points with pride to its shaping of men's lives is like a person pointing with pride to his parents as if he had personally selected them. Institutions do try to select, but they make conspicuous mistakes and they cannot predict.

Society has an evolving pattern of growth. It seems destined to follow false prophets until it is on the brink of disaster, when the almost superhuman leadership necessary to turn it back toward normal appears. It never quite gets back, however, because there is no agreement about normality. What was normal yesterday is abnormal today, and tomorrow's normal is still different from today's. Is our halting progress due to the fact that we plan on a normality that is evanescent?

In its twenty-eighth annual report, the Commonwealth Fund asks such questions, and it answers them hypothetically by concluding that it is not *how much* it does but what *kind* of things it lays its hand to that really matters.

MASSACHUSETTS MEDICAL SOCIETY

DEATHS

O'HALLORAN — William T. O'Halloran, M.D., of Newtonville, died March 21. He was in his forty-ninth year.

Dr. O'Halloran received his degree from Tufts College Medical School in 1924. He was assistant professor of medicine at Boston University School of Medicine; and physician-in-chief, Sixth Medical Service, Boston City Hospital. He was a member of the American College of Physicians, the American Heart Association and the New England Heart Association and a fellow of the American Medical Association.

His mother, his widow, a son and five sisters survive.

SANDLER — Frank F. Sandler, M.D., of Revere, died March 24. He was in his fifty-seventh year.

Dr. Sandler received his degree from Tufts College Medical School in 1915. He was a member of the American Society of Anesthetists and a fellow of the American Medical Association.

His widow, two sons and a daughter survive.

TAYLOR — Lois E. Taylor, M.D., of Belchertown, died March 21. She was in her thirty-eighth year.

Dr. Taylor received her degree from University of Vermont College of Medicine in 1933. She was a member of the New England Society of Psychiatry and the New England Pediatric Society.

Her father and four brothers survive.

MEDICOLEGAL ABSTRACT

Unauthorized Practice: Right of dentist injured by competition of unlicensed practitioner to obtain a court order to prohibit it. A recent New Jersey decision clarifies the function of statutes limiting the right of professional practice to licensed practitioners and the rights that the license confers on them. Two licensed dentists and an association of several licensed dentists sought to enjoin an unlicensed dentist from continuing to practice. The New Jersey statute provided that no one should practice dentistry in that state unless licensed to do so by the State Board of Registration and Examination. The statute provided a money penalty, and a supplement to the statute permitted the Attorney General or the State Board of Dentistry to bring suit to enjoin practice by an unlicensed dentist. The suit was not brought by the Attorney General or the State Board but by licensed dentists who complained that they were losing business and fees because of the unfair and illegal competition of the defendant. They claimed the right to be free from competition from a person practicing without a license.

The court rejected this claim, saying:

> Prior to the enactment of the dentistry statute no such property right existed. Whether the statute created such right depends upon the purpose for which it was enacted. . . . I think that the statute in question was passed solely for the protection of the public as against incompetents, and whatever financial benefit results to persons licensed thereunder by the exclusion of unlicensed persons from practicing dentistry is merely incidental, and that the statute was not intended to vest a property right in one licensed thereunder which the licensee is entitled to have protected by a suit of this nature.

The court thus gives a broad indication that a licensed practitioner who is injured by the competition of an unlicensed practitioner has no right on his own initiative, unless the statute gives him one, to have a court eliminate that competition. If the public board or organization cannot be persuaded to take the action they are authorized to take, the injured practitioner has no remedy.

It is well to bear in mind that the statute or circumstances governing another profession or applicable in another state may give the injured practitioner the right that the court holds the New Jersey dentist did not have. (*Lipman* v. *Formar*, 138 New Jersey Eq. 556.)

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

NEW LOCATION OF ANTIPNEUMOCOCCUS SERUM DEPOT

The present procedure for issue of antipneumococcus serum by the Department of Public Health was summarized in the December 12 issue of the *Journal*. The following change has arisen since that time: because of the removal of the Bacteriological Laboratory from the State House, the supply of antipneumococcus serum has been transferred to the Division of Biologic Laboratories. Supplies of antipneumococcus serums, Types 1 to 33, inclusive, may be obtained, under the conditions described in the previous notice, from the Division of Biologic Laboratories, 375 South Street, Jamaica Plain 30 (telephone, ARNold 4127). Emergency service is available at all hours.

COMMUNICABLE DISEASES IN MASSACHUSETTS FOR FEBRUARY, 1947

RÉSUMÉ

Diseases	February 1947	February 1946	Seven-Year Median
Chancroid	2	1	1*
Chicken pox	2544	765	1340
Diphtheria	58	21	13
Dog bite	558	487	511
Dysentery, bacillary	13	9	9
German measles	101	216	188
Gonorrhea	346	494	326
Granuloma inguinale	1	0	0*
Lymphogranuloma venereum	2	1	1*
Malaria	8	102	5
Measles	2021	1142	1753
Meningitis, meningococcal	9	19	19
Meningitis, Pfeiffer-bacillus	4	2	2
Meningitis, pneumococcal	5	4	4†
Meningitis, staphylococcal	1	0	0†
Meningitis, streptococcal	0	0	0†
Meningitis, other forms	2	0	0†
Meningitis, undetermined	7	5	5†
Mumps	667	639	1091
Pneumonia, lobar	128	223	356
Poliomyelitis	0	1	2
Salmonellosis	5	8	4
Scarlet fever	629	706	1201
Syphilis	271	526	374
Tuberculosis, pulmonary	205	205	192
Tuberculosis, other forms	13	11	14
Typhoid fever	0	0	2
Undulant fever	4	0	1
Whooping cough	620	410	595

*Three-year median.
†Five-year median.

COMMENT

Primary interest is again focused this month on diphtheria. The number of cases reported in February is nearly three times that reported during the month of February, 1946, and slightly more than four times the seven-year median. The spread into the Connecticut Valley, noted in January, is continuing and calls for prompt action on immunization in this area to check the spread. The usual seasonal decline is beginning. The highest month was December, with 86 cases; 77 cases were recorded in January.

Chicken pox has shown a sharp increase this month over February, 1946, and is about two times the seven-year median. This is the continuation of the upward swing in the cyclic rhythm that began a year ago.

Diseases above the seven-year median for the month are bacillary dysentery, measles, salmonellosis, pulmonary tuberculosis, undulant fever and whooping cough.

Among the diseases below the seven-year median are German measles, meningococcal meningitis, mumps, lobar pneumonia, poliomyelitis, scarlet fever and typhoid fever.

GEOGRAPHICAL DISTRIBUTION OF CERTAIN DISEASES

Anthrax was reported from: Milton, 1; total, 1.

Diphtheria was reported from: Amesbury, 1; Boston, 35; Bridgewater, 1; Chicopee, 5; Dedham, 1; Easthampton, 3;

Holyoke, 1; Lowell, 1; Malden, 2; Medford, 1; Natick, 1; New Bedford, 2; Springfield, 2; West Bridgewater, 2; total, 58.

Dysentery, amebic, was reported from: Boston, 1; total, 1.

Dysentery, bacillary, was reported from: Worcester, 13; total, 13.

Encephalitis, infectious, was reported from: Brockton, 1; total, 1.

Lymphocytic choriomeningitis was reported from: Cambridge, 1; Worcester, 1; total, 2.

Malaria was reported from: Belmont, 1; Boston, 1; Bridgewater, 1; Cambridge, 1; Medford, 1; Peabody, 1; Southbridge, 1; Westfield, 1; total, 8.

Meningitis, meningococcal, was reported from: Boston, 3; Brookline, 1; Haverhill, 1; Lynn, 1; Somerville, 1; Waltham, 2; total, 9.

Meningitis, Pfeiffer-bacillus, was reported from: Boston, 1; Lowell, 1; Medford, 1; Somerville, 1; total, 4.

Meningitis, pneumococcal, was reported from: Billerica, 1; Boston, 1; Palmer, 1; Salem, 1; Worcester, 1; total, 5.

Meningitis, staphylococcal, was reported from: Springfield, 1; total, 1.

Meningitis, other forms, was reported from: Boston, 1; Worcester, 1; total, 2.

Meningitis, undetermined, was reported from: Cambridge, 2; Lowell, 1; Springfield, 1; Worcester, 3; total, 7.

Salmonellosis was reported from: Attleboro, 1; Auburn, 1; Haverhill, 1; Melrose, 1; Wellesley, 1; total, 5.

Septic sore throat was reported from: Boston, 11; Brockton, 1; Fall River, 1; Holyoke, 1; Lancaster, 1; Medford, 1; Newton, 1; total, 17.

Tetanus was reported from: Chelsea, 1; total, 1.

Trachoma was reported from: Boston, 2; total, 2.

Trichinosis was reported from: Boston, 1; Fall River, 1; Quincy, 1; Westport, 1; total, 4.

Undulant fever was reported from: Leominster, 1; Northampton, 1; Shelburne, 1; Worcester, 1; total, 4.

MISCELLANY

NOTES

The following appointments to the teaching staff of Harvard Medical School were recently announced: Thomas Gucker, 3rd, of Brookline (A.B. Princeton University 1937, M.D. University of Pennsylvania 1941), assistant in orthopedic surgery; Robert Pirrie Woods, of Boston (S.B. Yale University 1935, M.D. McGill University 1940), research fellow in surgery; Earl Baker Wert, of Collingswood, New Jersey (M.D. University of Pennsylvania 1940) assistant in pathology; Peter Hobart Knapp, of Boston (A.B. Harvard University 1937, M.D. Harvard University 1941), assistant in psychiatry; Stanley Leonard Robbins, of Brookline (S. B. Mass. Institute of Technology 1936, M.D. Tufts College 1940), instructor in pathology; Albert Irwin Mendeloff, of Charleston, West Virginia (A.B. Princeton University 1938, M.D. Harvard University 1942, M.P.H. Harvard University 1944), assistant in medicine; Curtis Prout, of Dover (A.B. Harvard University 1937, M.D. Harvard University 1941), assistant in medicine; Joseph Edward Warren, of Boston (A.B. Boston College 1934, M.D. Harvard University 1938), assistant in medicine; Mary Ochsenhirt Amdur, of Somerville (S.B. University of Pittsburgh 1943, Ph.D. Cornell University 1946), assistant in ophthalmic research; Toufic Hanna Kalil, of Manchester, New Hampshire (M.D. Tufts College 1931) assistant in radiology; Jean Patricia Davis, of Rockville, Missouri (A.B. Smith College 1939, M.D. Yale University 1943), research fellow in pediatrics; Aniela Stephanie Zygmuntowicz, of Uxbridge (A.B. Brown University 1938) research fellow in pediatrics; and Fred Ralph Zeiss, of Chicago, Illinois (A.A. Crane College 1926, B.M. Northwestern University 1930, M.D. Northwestern University 1931, S.M. Northwestern Graduate School 1931), assistant in orthopedic surgery.

AUTOMOBILE LIABILITY INSURANCE

According to a letter recently forwarded to members of the Newton Chamber of Commerce, Chapter 614, Acts of 1946, entitled "An Act Relative to Action for Death and Injuries Resulting in Death," drastically changes the present limit of damages in suits for wrongful death. Previous to the passing of this act, which became effective January 1, 1947, the limit of damages that could be recovered in a suit for the negligent cause of death to a person was $10,000. This was amended by the 1946 General Court by increasing the amount to $15,000. In addition, a right is given to sue for "conscious suffering" preceding death. Damages for death are assessed on the degree of culpability of the person causing the death by his negligence, and also according to the pecuniary loss sustained to the parties entitled to benefit by the suit. Previous to this change in the law, damages were assessed according to the degree of culpability only. As a result, it is possible that a motorist in Massachusetts who is involved in an accident in which a person is fatally injured, may find himself liable for damages amounting to $15,000 or $20,000.

Since the statutory amount of compulsory insurance remains the same, — that is, $5,000 liability for damages to any one person, and $10,000 for each accident, — the average motorist will not be afforded sufficient financial protection by that type of policy. Insurance companies that carry liability coverage are therefore recommending to their policyholders an increase in the amount of liability to $15,000 for damages to any one person and $30,000 for damages arising out of any one accident.

BOOKS AND WORLD RECOVERY

The desperate and continued need for American publications to serve as tools of physical and intellectual reconstruction abroad has been made vividly apparent by appeals from scholars in many lands. The American Book Center for War Devastated Libraries has been urged to continue meeting this need at least through 1947. The Center is therefore making a renewed appeal for American books and periodicals—for technical and scholarly books and periodicals in all fields and particularly for publications of the past ten years. Complete or incomplete files of the *New England Journal of Medicine* will be especially welcome.

The generous support that has been given to the Center has made it possible to ship more than 700,000 volumes abroad in the past year. It is hoped to double this amount before the Center closes. The books and periodicals that personal or institutional libraries can spare are urgently needed and will help in the reconstruction that must preface world understanding and peace.

Contributions should be sent to the American Book Center, c/o The Library of Congress, Washington 25, D. C., freight prepaid.

BOOK REVIEWS

Preventive Medicine and Public Health. By Wilson G. Smillie, M.D., D.P.H., Sc.D. (hon.). 8°, cloth, 607 pp., with 41 illustrations and frontispiece and 21 tables. New York: Macmillan Company, 1946. $6.00.

This text gives an excellent summary of the present-day activities of physicians and public-health agencies in the battle against disease, the amelioration of physical and mental handicaps and the promotion of positive health. The picture is painted with broad strokes and with only enough detail to give an adequate understanding of both the problems and the best recognized methods of solution. This makes it possible to cover a wide scope and yet to keep the text handy in size.

The author is a man who has devoted his life to a career in public health, both as a health officer and later as an outstanding teacher, first in Brazil and then at the Harvard School of Public Health and Cornell University Medical College. His interest in field studies did not cease with the beginning of his teaching career. Contributions to epidemiology and public-health administration continue to come from his pen.

Massachusetts readers will recognize the author's loyalty to a pioneer in public health in the quotations from Lemuel Shattuck's report on the sanitary condition of Massachusetts (1850) that grace the beginning of each section. The modern sound of the quotations reminds one of the broad scope of the thinking of the commission that Shattuck headed.

Some specialists will believe that certain sections do not give the latest word regarding their own special field. The terminology is often not the latest. These are inevitable shortcomings of textbooks of broad scope because one man, even with the considerable assistance obtained by the author, cannot be expected to be familiar with the intimate details

of the many special fields. The typographical and editorial errors seem to have been kept at the minimum.

The book not only is valuable in orienting the medical student in preventive medicine but also is a mine of information for the practicing physician and the public-health worker. It will be useful in suggesting sources of public services that patients are often unable to provide for themselves. It should be on the desk of every physician. The readable style, logical arrangement, useful illustrations and excellent type and paper make it a pleasure to use the book.

Hippocratic Wisdom: For him who wishes to pursue properly the science of medicine. A modern appreciation of ancient scientific achievement. By William F. Petersen, M.D. 8°, cloth, 263 pp. Springfield, Illinois: Charles C Thomas, 1946. $5.00.

This thoroughly fascinating and scholarly volume is a modern interpretation of ancient scientific achievement, a commentary and interpretation of the Hippocratic texts in the light of present knowledge, for those who wish to pursue properly the study of medicine. The author is particularly interested in the relations of climate and seasons to human disease, and their influence on clinical phenomena. Beginning with "Airs, Waters and Places," he reviews the principal works of Hippocrates, and illustrates their sagacity and truth by applying them to actual case histories of erysipelas, anoxia, miscarriage, epilepsy, rabies, pneumonia, pleurisy, empyema, phthisis, bone tuberculosis, appendicitis, talipes, tetanus and many others. Nearly everything that modern medicine has discovered was foreshadowed, at least *in posse*, by the Hippocratic wisdom. Moreover, the author emphasizes the fact that, in both the theory and the practice of physic, Hippocrates always viewed his problems in the light of the concept of the whole man, not of the disease as a so-called "clinical entity." Only recently has it been realized that from this standpoint alone can disease in human beings be properly appreciated and understood.

Dr. Petersen's work is illustrated by an abundance of well chosen figures in the text. It is also illuminated by copious notes gathered into an appendix, which constitutes an invaluable commentary on the text. Finally, there are many bibliographic references, ancient and modern, a glossary and indexes of illustrations and contents. In modest compass, this is a monumental and inspiring book.

Ophthalmology in the War Years. Edited by Meyer Wiener, M.D. Volume I. 1940–1943. 8°, cloth, 1166 pp. Chicago: Year Book Publishers, Incorporated, 1946. $13.50.

With the support of the National Research Council and through the efforts of a committee under the leadership of Dr. Meyer Wiener, with thirty-six able contributors, the ophthalmologic literature of the world during the war years is brought to the elbow of practicing ophthalmologists in the form of two volumes. Volume I reviews over eighty-five hundred important articles published during the years 1940–1943. Volume II, in press, will cover the period 1944–1946. Thus, the ophthalmologists who served in the armed forces and those who served at home are given an unparalleled opportunity to catch up with the advances in ophthalmology.

Great commendation is due the contributors of this valuable review, to the National Research Council and to the publishers for bringing such an important aid and stimulus to the ophthalmologic profession. Every progressive ophthalmologist will either buy these volumes for his working library or combine with his colleagues to obtain the volumes for his local medical library.

Technique of Psychoanalytic Therapy. By Sandor Lorand, M.D. 8°, cloth, 251 pp. New York: International Universities Press, 1946. $3.50.

This volume is based on talks that the author has given, especially those at the New York Psychoanalytic Institute. Although it is admitted in the preface that therapeutic achievement may be arrived at "through different avenues of approach," the text follows closely the Freudian school, including dream interpretations, oedipus complex and the couch. If the reader is not orthodox — that is, a heretic — he will find time to do considerable day-dreaming himself while perusing the pages. If one is orthodox, reading will be unnecessary.

The linking of physiologic forces with the psychologic is admitted only because it helps the patient to understand his symptoms.

One patient who fell asleep during the analytical hour is stated to have been expressing "his strong defense against change and fear that his defenses would be broken." Here the interpretation of the psychology of sleep will be new to psychiatrists who have been compelled to give sedatives for the induction of sleep to overcome "defense against change and fear."

"Character neurosis" is not defined clearly but apparently applies to neurotic patients who have resistance to analysis. In dream analysis the author quotes dreams that appear to be unusual to one who has dreamed and who has listened to other people's dreams, and it is stated that "usually there are no indications of feelings in dreams or, if present, they are milder than the patient's actual, repressed feeling associated with the unconscious, latent desire."

The final chapter, on termination of analysis, could not, of course, have given explicit directions. This is a moot problem, even among psychoanalysts.

Report on a Survey of Medical Education in Canada and the United States. By C. E. Dolman, M.R.C.S. (Eng.), L.R.C.P., M.B., B.S., M.R.C.P., D.P.H., Ph.D. (Lond.), and F.A.P.H.A. 4°, paper, 53 pp., with 2 tables. Toronto: University of Toronto, 1946.

Something of the character of the author of this pamphlet is revealed by his biography as reported in *American Men of Science.* He is an Englishman educated in London who has acquired the degrees of Bachelor of Medicine, Bachelor of Science, Doctor of Public Health and Doctor of Philosophy. He worked first as house surgeon and later in research at Saint Mary's Hospital; then he came to Canada, where he engaged in further research at the Connaught Laboratory in Toronto. Finally he moved to Vancouver, where he is now professor of bacteriology and preventive medicine in the University of British Columbia, as well as director of the Provincial Board of Health Laboratories. This record speaks for his industry and competency.

A little over a year ago he was instructed by the Board of Governors of his university to survey medical education in the United States and Canada. He approached the task by visiting eleven representative Canadian schools and twenty-two in the United States. He talked with medical educators as he met them, he received many interesting and varied impressions, and he developed a clear-cut picture in his mind of the main principles and prerequisites of a first-class school. This picture he now attempts to describe in writing.

He emphasizes several points that most medical educators would also stress: the need of university sponsorship for a medical school, of adequate budget and hospital facilities and of a strong faculty guided by a competent dean.

The author is particularly impressed with the need for a school to be intimately associated with a university, to assure, as he expresses it, physical contiguity and spiritual affinity between the faculty of medicine and other university faculties. He believes, with equal firmness, in full-time clinical teaching, the university having complete control of a sufficient number of hospital beds to ensure proper teaching facilities. In his own locality he wishes his school to exert a generally helpful educational influence by providing postgraduate training for practitioners, by improving hospital standards and by developing a close relation with city and provincial health departments.

The report is written intelligently. As the author says, it is likely to be approved in general by educators. Yet, he adds, he is certain that his suggestions will meet strong opposition from certain quarters. He hints that it may be difficult to obtain sufficient funds from the purses of the people to develop and finance a thoroughly sound program of medical education. Good medical education is costly, and not everyone sees the need for it.

BOOKS RECEIVED

The receipt of the following books is acknowledged, and this listing must be regarded as a sufficient return for the courtesy of the sender. Books that appear to be of particular interest will be reviewed as space permits. Additional information in regard to all listed books will be gladly furnished on request.

Diseases of the Skin. By George C. Andrews, M.D., associate clinical professor of dermatology, Columbia University College of Physicians and Surgeons, chief of clinic, Department of Dermatology, Vanderbilt Clinic, chief, Derma-

tology Clinic, Roosevelt Hospital, attending dermatologist, Presbyterian Hospital and Roosevelt Hospital, and consulting dermatologist and syphilologist, Tarrytown Hospital, Grasslands Hospital, Valhalla, St. John's Hospital, Yonkers, Greenwich Hospital and Beekman-Downtown Hospital. Third edition. 8°, cloth, 937 pp., with 971 illustrations. Philadelphia and London: W. B. Saunders Company, 1946. $10.00.

Public Health and Welfare Reorganization: The postwar problem in the Canadian provinces. By Harry M. Cassidy, Ph.D. 8°, cloth, 464 pp. Toronto: The Ryerson Press, 1945. Cloth, $4.50; paper $3.50.

Muscle Testing: Techniques of manual examination. By Lucille Daniels, M.A., director and associate professor of physical therapy, Stanford University; Marian Williams, M.A., assistant professor of physical therapy, Stanford University; and Catherine Worthingham, M.A., director of professional education, National Foundation for Infantile Paralysis, Incorporated. 4°, paper, 189 pp. Designed and illustrated by Harold Black, with 349 diagrammatic line drawings. Philadelphia and London: W. B. Saunders Company, 1946. $2.50.

Electrocardiography in Practice. By Ashton Graybiel, M.D., Captain, Medical Corps, United States Naval Reserve, coordinator of research, United States Naval School of Aviation Medicine, Pensacola, Florida; and Paul D. White, M.D., lecturer in medicine, Harvard Medical School, and physician, Massachusetts General Hospital. With the assistance of Louise Wheeler, A.M., executive secretary, Cardiac Laboratory, Massachusetts General Hospital, and Conger Williams, M.D., assistant in medicine, Harvard Medical School and Massachusetts General Hospital. Second edition. 8°, cloth, 458 pp., with 323 illustrations. Philadelphia: W. B. Saunders Company, 1946. $7.00.

Injury and Death under Workmen's Compensation Laws: The fundamental principles as interpreted by the courts and compensation experts in all compensation states and in other jurisdictions, including the American territories and England. By Samuel B. Horowitz, A.B., LL. B. 8°, cloth, 486 pp. Boston: Wright and Potter Printing Company, 1946. $6.00.

Electrocardiography, including an atlas of electrocardiograms. By Louis N. Katz, M.D., director of cardiovascular research, Michael Reese Hospital, Chicago, and professorial lecturer in physiology, University of Chicago School of Medicine. Second edition, thoroughly revised. 4°, cloth, 882 pp., with 525 illustrations. Philadelphia: Lea and Febiger, 1946. $12.00.

Nursing in Commerce and Industry. By Bethel J. McGrath, R.N., for the National Organization for Public Health Nursing. 8°, cloth, 356 pp. New York: Commonwealth Fund, 1946. $3.00.

Sex, Marriage and Family. By Thurman B. Rice, M.D., professor of bacteriology and public health, Indiana University School of Medicine. 8°, cloth, 272 pp. Philadelphia: J. B. Lippincott Company, 1946. $2.50.

Fees and Fee Bills: Some economic aspects of medical practice in nineteenth century America. By George Rosen, M.D., Ph.D. Supplement No. 6 to the Bulletin of the History of Medicine. 4°, paper, 91 pp. Baltimore: Johns Hopkins Press, 1946. $1.50.

Water Treatment and Purification. By William J. Ryan, M.E. Second edition. 8°, cloth, 270 pp., with 66 illustrations. New York and London: McGraw-Hill Book Company, Incorporated, 1946. $2.75.

Women in Industry: Their health and efficiency. By Anna M. Baetjer, Sc.D., assistant professor of physiological hygiene, School of Hygiene and Public Health, Johns Hopkins University. Issued under the auspices of the Division of Medical Sciences and the Division of Engineering and Industrial Research, National Research Council. Prepared in the Army Industrial Hygiene Laboratory. 8°, cloth, 344 pp., with 122 tables. Philadelphia and London: W. B. Saunders Company, 1946.

NOTICES

ANNOUNCEMENTS

Dr. John K. Brines announces the removal of his office to 619 Washington Street, Wellesley.

Dr. Arthur W. Clancy has returned from military service and has resumed practice at 102 High Street, Newburyport, specializing in diseases of the eye, ear, nose and throat.

Dr. Henry W. Ohrenberger announces the opening of his office at 1101 Beacon Street, Brookline, for the practice of gynecology and obstetrics.

GREATER BOSTON MEDICAL SOCIETY

A meeting of the Greater Boston Medical Society will be held in the auditorium of the Beth Israel Hospital on Tuesday, May 6, at 8:15 p.m. Dr. Willem J. Kolff, chief of the Department of Medicine, Municipal Hospital, Kampden, Holland, will speak on the subject "New Ways of Treating Uremia."

AMERICAN CONGRESS OF PHYSICAL MEDICINE

The twenty-fifth annual scientific and clinical session of the American Congress of Physical Medicine will be held September 2 to 6, inclusive, at the Hotel Radisson, Minneapolis. Scientific and clinical sessions will be given on September 3, 4, 5 and 6. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions the annual instruction courses will be held September 2, 5, 4 and 5. These courses will be open to physicians and to therapists registered with the American Registry of Physical Therapy Technicians.

For information concerning the convention and the instruction course, address the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2.

SOCIETY MEETINGS AND CONFERENCES

CALENDAR OF BOSTON DISTRICT FOR THE WEEK BEGINNING THURSDAY, APRIL 24

FRIDAY, APRIL 25

*9:00–10:00 a.m. Temporal Arteritis. Dr. Roy C. Crosby. Joseph H. Pratt Diagnostic Hospital.

*10:00 a.m.–12:00 m. Medical Staff Rounds. Peter Bent Brigham Hospital.

MONDAY, APRIL 28

*12:15–1:15 p.m. Clinicopathological Conference. Peter Bent Brigham Hospital.

TUESDAY, APRIL 29

12:00 m.–1:00 p.m. Dermatological Service, Grand Rounds. Amphitheater, Dowling Building, Boston City Hospital.

*12:15–1:15 p.m. Clinicoroentgenological Conference. Peter Bent Brigham Hospital.

WEDNESDAY, APRIL 30

*9:00–10.00 a.m. The Relation of Enzyme Chemistry to Some Recent Advances in Chemotherapy. Dr. Gerhardt Schmidt. Joseph H. Pratt Diagnostic Hospital.

*11:00 a.m.–12:00 m. Medical Clinic. Amphitheater, Children's Hospital.

*12:00 m. Clinicopathological Conference. (Children's Hospital.) Amphitheater, Peter Bent Brigham Hospital.

*2:00–3:00 p.m. Combined Clinic by the Medical, Surgical and Orthopedic Services. Amphitheater, Children's Hospital.

*Open to the medical profession.

APRIL 22. Cutter Lecture. Page 554, issue of April 10.

APRIL 26–MAY 4. Industrial Health Meetings. Page 456, issue of March 20.

APRIL 28–MAY 2. American College of Physicians. Page 206, issue of August 8.

MAY 6. Greater Boston Medical Society. Notice above.

MAY 8. Cerebral Hemorrhage. Dr. Raymond Adams. Pentucket Association of Physicians. 8:30 p.m. Haverhill.

MAY 9. Boston University School of Medicine Alumni Association. Page 554, issue of April 10.

MAY 19–22. Massachusetts Medical Society. Annual Meeting. Hotel Statler, Boston.

(*Notices continued on page xix*)